

VA
50
.U66
1985

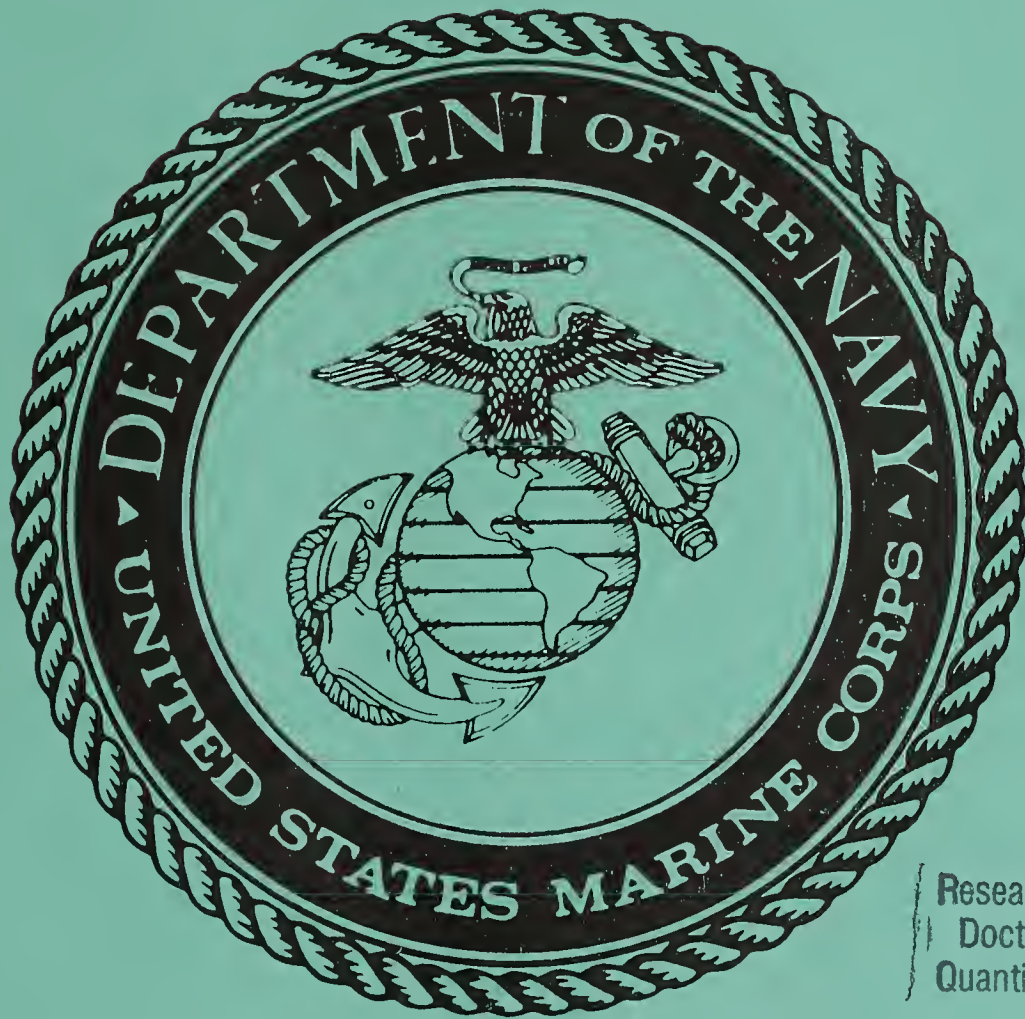
Library of the Marine Corps



3000205061

DIRECTOR MARINE CORPS RESEARCH CENTER
ATTN COLLECTION MANAGEMENT (C4ORCL)
MCCDC
2040 BROADWAY ST
QUANTICO VA 22134-5107

ADVANCED AMPHIBIOUS STUDY GROUP CONCEPT PAPER



DMCCAT

Research/Reference Library
Doctrine Center, MCDEC
Quantico, Va. 22134-5001

GUIDELINES FOR FORMING A COMPOSITE MAGTF

MARINE CORPS UNIVERSITY LIBRARY

Third Edition

1985

2858

THE ADVANCED AMPHIBIOUS STUDY GROUP

The Advanced Amphibious Study Group was formed in 1974 and is under the cognizance of the Chief of Staff, Headquarters, U. S. Marine Corps. Its members are field grade officers, predominantly, a colonel to be director and lieutenant colonels, selected for their varied operational/staff experience and broad academic and professional education. The mission of the Group is:

"To study questions and issues of critical importance to the Marine Corps, principally in the midrange period; to develop original concepts and solutions; and where appropriate, to recommend the means and methods of implementing the solutions proposed."



DEPARTMENT OF THE NAVY
HEADQUARTERS UNITED STATES MARINE CORPS
WASHINGTON, D.C. 20380

CS-AASG
1 Aug 85

GUIDELINES FOR FORMING A COMPOSITE MAGTF

Third Edition

This paper is a new edition of the Advanced Amphibious Study Group's concept for forming a composite Marine air-ground task force from two or more smaller MAGTFs. Composite MAGTFs are needed because the nation cannot always strategically deploy its Marines in formations as large as will be required on the battlefield.

The principal changes in this edition are:

- For easier reference, the three case studies have been moved to addenda.
- New data on proposed augmentation force headquarters, provided by I MAF, have been included.
- The discussion of Navy considerations has been expanded into an addendum.

Lieutenant Colonel Richard J. Blanchfield is the leader of the project team which produced this edition. He has been principally assisted by Lieutenant Colonel Jerry C. Black. Contributions were also made by Lieutenant Colonels Richard W. Hodory and John S. Lowery.

Your comments and recommendations are again invited.

James J. Stewart

JAMES J. STEWART
Colonel, U.S. Marine Corps
Director, Advanced Amphibious Study Group



DEPARTMENT OF THE NAVY
HEADQUARTERS UNITED STATES MARINE CORPS
WASHINGTON, D.C. 20380

CS-AASG
1 Aug 85

ADVANCED AMPHIBIOUS STUDY GROUP CONCEPT PAPER

Subj: GUIDELINES FOR FORMING A COMPOSITE MAGTF

Table of Contents

<u>Paragraph</u>	<u>Page</u>
1. Introduction to the Guidelines.....	2
2. The Guidelines Summarized.....	3
3. The Process of Transitioning Arriving Forces into a Composite MAGTF.....	4
a. Transition Phases.....	4
b. Governing Principles.....	6
c. Key to the Concept - The Composite MAGTF (Forward)..	6
d. The "Deadly Deltas" Must be Considered.....	7
4. Composite MAGTF Cases.....	8
a. MAB plus MAB.....	8
b. MAU plus MAU.....	8
c. MAB plus MAU.....	8

Addenda

I. MAB Plus MAB Case.....	I-1
II. MAU Plus MAU Case.....	II-1
III. MAB Plus MAU Case.....	III-1
IV. Navy Considerations.....	IV-1
V. "Deadly Deltas" from the MAGTF Lift Model and CPXs....	V-1
VI. Composite Fire Support Coordination.....	VI-1
VII. Composite Aviation.....	VII-1
VIII. Composite Combat Service Support.....	VIII-1
IX. Composite Administration.....	IX-1
X. Compositing Directive.....	X-1
XI. Composite Interoperability and Standardization.....	XI-1

1. Introduction to the Guidelines

a. Definition. The term "composite MAGTF," as used here, is defined as a MAGTF formed using forces from two or more other MAGTFs. This is not the simpler case of a single MAGTF being reinforced. Rather, the concern is with existing MAGTFs that are directed to form into a single larger MAGTF. Further, the type of composite MAGTF is dictated by either the subsuming MAGTF's type (e.g., MAB + MAU = composite MAB) or the next higher MAGTF's type (e.g., MAU + MAU = composite MAB, or MAB + MAB = composite MAF). It is not determined simply by the numbers of personnel, aircraft or equipment. A basic assumption is that the composite MAGTF being formed is intended for employment at an expeditionary location, e.g., is going to war.

b. Why Composite MAGTFs?

(1) The primary mission focus of the Marine Corps has been and is amphibious forcible entry operations. However, we are also ready to respond to other crises or contingencies worldwide. The recent decisions associating Marine brigades with the Maritime Prepositioning Ships (MPS) program are recognition by the leaders of this country of the great utility in continuing to rely on the Marine Corps as the nation's principal "Force in Readiness". MPS and other factors changing the use of military power in the world today have caused the Marine Corps to examine more closely its deployment planning and execution. Often this examination has resulted in the expectation of faster, less structured deployments at the expense of the more deliberate operations which the Marine Corps might otherwise prefer.

(2) Because of the paucity of amphibious lift and the addition of the maritime prepositioning program, innovative, frequently difficult decisions have been made which, in essence, have established the MAB as the cutting edge of our Fleet Marine Forces. The approved permanent MAGTF headquarters concept, with its six operational MAB headquarters, is an example of such a decision. This decision greatly enhances the Marine Corps' ability to rapidly plan and embark for both amphibious and MPS operations. It also provides a rational way of maintaining effective MAGTF command and control during buildup of forces in theater. However, while MABs enable us to more efficiently match our strategic mobility means, they are not envisioned as a replacement for the MAF as our primary warfighting organization.

(3) The MAF will continue to be the MAGTF required for most of our planning missions and for sustained combat operations ashore. However, our concept for deploying the MAF is changing. Often we will not be able to get a MAF quickly enough to a place of employment; therefore, we must be prepared to transition separately deploying smaller MAGTFs into a composite MAF in an expeditionary environment. During a crisis situation, and while planning continues, we may well deploy the first-ready MAGTF, perhaps one of our increasing number of "prepackaged" or standing MAGTFs. Later, we may send additional MAGTFs as they become available to increase our combat capability. For the foreseeable future, the composite MAF thus formed will most likely be composed of some combination of forward deployed or mission deployed amphibious forces, and land or maritime prepositioning forces. The specific combination of forces used will depend upon, among other things, the factors of time, distance, and strategic mobility resources available. In sum, the

requirement to rapidly deploy a credible combat force in response to a crisis situation, within real-world lift constraints, will often drive the Marine Corps to the formation and employment of composite MAFs.

c. Fundamental Premises. The guidelines addressed below, primarily for forming a composite MAF, have been developed first with the premise that they must be broad, flexible, and applicable Corps-wide. Additionally, the compositing process should be germane in the forming of a composite MAB from forward deployed MAUs, which should be viewed as an intermediate step in the forming of the composite MAF. Most importantly, however, the process has to be able to stand alone if need be, and not rely on forces beyond those in the deploying MAGTFs. This means that while we plan for augmentation to build additional command and control, firepower, and sustainability in the composite force, such augmentation may be only partial, late in arriving, or even non-existent. Thus, the guidelines provide for a worst-case, but viable process that becomes simplified when augmentation forces and equipment are introduced.

d. What is Covered. The guidelines are first summarized, and their development then begins with an examination of the process of transitioning arriving forces into a composite MAGTF. Phases in the transitioning process and governing principles are defined, and an overview of three composite MAGTF cases is presented. In the first two addenda, the major cases of forming the composite MAGTF by using two MABs and then two MAUs are examined. Next, the lesser case of compositing a MAB and a MAU is treated. A specific process and set of operating principles are developed for each of the three cases. Within each of the three cases will also be found scenario independent planning factors and key decision points. Several other addenda, describing Navy considerations, additional lift requirements, fire support coordination, aviation, combat service support, administration, the compositing directive, and interoperability and standardization complete the booklet.

2. The Guidelines Summarized

a. The essence of the guidelines for the two major cases is as follows:

- One of the deploying MAGTFs is selected as the primary or base MAGTF. It will be the MAGTF which the other compositing MAGTFs join. The primary MAGTF is designated next-higher-MAGTF (Forward), and its commander is the composite MAGTF (Forward) commander.

- Initial single command channels for the composite Ground Combat Element (GCE), composite Aviation Combat Element (ACE), and composite Combat Service Support Element (CSSE) are established by designating:

- The primary MAGTF's ACE as Wing/Group (Forward) and its commander as commander of the composite ACE.

- The primary MAGTF's CSSE as FSSG/BSSG (Forward) and its commander as commander of the composite CSSE.

- Another MAGTF headquarters as Division/Regiment (Forward) and its commander as commander of the composite GCE. (Other alternatives for interim commander of the composite GCE will be addressed in Addendum I (MAB Plus MAB Case), along with the rationale for those alternatives.)

- Augmentation, as it arrives, adds combat power, sustainability, and a more conventional command and control structure, allowing a conventional single MAGTF to emerge.

b. In the lesser case, the essence is that:

- The smaller MAGTF joins the larger MAGTF, which provides the composite MAGTF headquarters.

- Control of each of the smaller MAGTF's elements passes to the corresponding element of the larger MAGTF.

3. The Process of Transitioning Arriving Forces into a Composite MAGTF

a. Transition Phases

(1) It is useful to consider the passage of time from the leading MAGTF's arrival in the objective area to the emergence of a composited, conventional, single MAGTF as being divided into three phases. These phases are not meant to be a rigid set of steps that must be followed sequentially in all cases. Rather, they provide a frame of reference within which the actions that can occur during the compositing process may be explained. The process begins when the proximity of two or more MAGTFs, either temporal or geographic, is such that to ensure unity of command, the formation of a composite MAGTF is required.

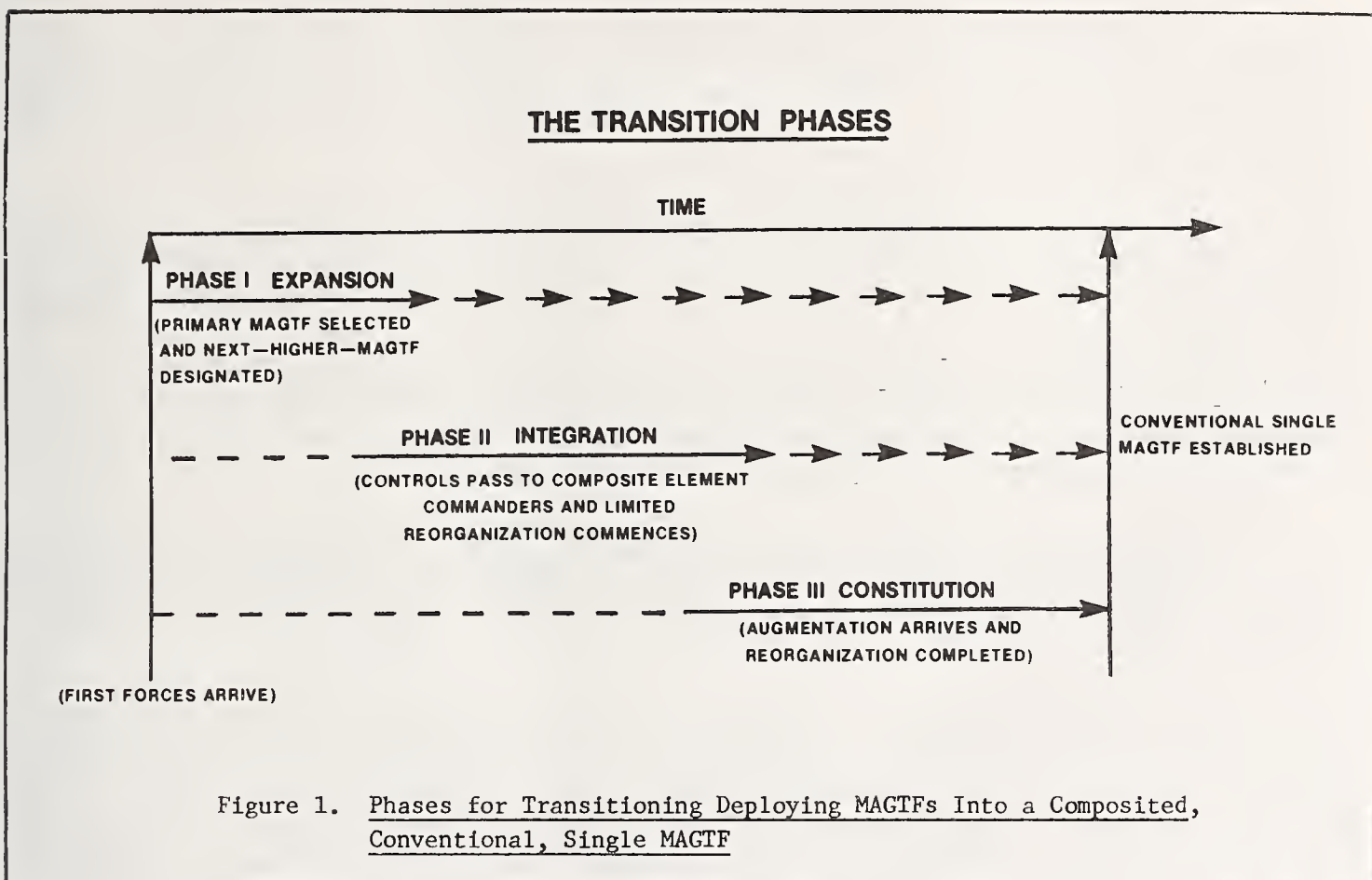
(2) Focusing on the major cases, the three phases of the compositing process are described as follows (see also Figure 1):

(a) Expansion. This phase is characterized by the arrival of two or more MAGTFs in the objective area. At this point in the transition process, forces are still organized and prepared to be employed within the MAGTFs in which they deploy. One of the arriving MAGTFs is selected as the primary or base MAGTF and designated next-higher-MAGTF (Forward). The commander of this primary MAGTF is placed in command as the composite MAGTF (Forward) commander. This phase includes only those actions necessary to achieve unity of command without reorganizing any of the MAGTFs. It ends when all the deploying MAGTFs have arrived in the objective area.

(b) Integration. During integration, a gradual merging of the arriving GCEs, ACEs, and CSSEs into composite elements occurs. One must realize that the rate and degree of this integration effort can be affected by a number of factors, such as geography, intensity of combat and future intentions. As soon as feasible, operational control of subordinate organizations passes to the composite element commanders. During this phase, the composite force operates in a "come as you are" mode and does not rely on the arrival of augmentation (additional forces or supplies not part of any of the deploying MAGTFs). This phase basically involves passages of command and control, and the limited reorganization of the MAGTFs to the extent feasible before the arrival of any augmentation. It ends when the responsibility for ground combat, aviation combat, and combat service support are each fully exercised through a single composite element command channel directly responsive to the composite MAGTF commander.

(c) Constitution. Through augmentation and subsequent further reorganization, a conventional, single MAGTF emerges. Arriving augmentation adds combat power and sustainability, and provides the command and control structure necessary to support such reorganization. In some cases, we might not get to the point of a fully conventional single MAGTF. Time constraints of a short operation or shortages of strategic mobility resources to bring in the necessary augmentation may prevent this from happening. Further, we may deliberately choose not to reach this final point in the compositing process because of future requirements for some or all of the MAGTFs in the objective area.

(3) The length and complexity of the process could be significantly reduced by the early arrival of augmentation forces. If, for example, the lift required to bring in the MAF Fly-in-Echelon (see Addendum V, Part III) were available on a timely basis, then many of the difficult decisions and transitions normally associated with the integration phase would be eliminated.



(4) Another important point to remember is that these phases will almost surely overlap. We may begin to integrate areas of responsibility well before the last MAGTF arrives; or augmentation forces, the MAF nucleus headquarters for example, may fall-in immediately on the first MAGTF that deploys. And, of course, additional MAGTFs could arrive in the objective area even after the third and final transition phase has been completed and a conventional, single MAGTF has emerged.

b. Governing Principles. There are several important principles which apply throughout the transition process:

(1) Unity of command is essential. The achievement of a purposeful, coordinated effort by the composite MAGTF and the requirement to deal with higher headquarters from a single perspective dictate that the composite MAGTF commander be named early. He should be designated at the same time that the decision to composite MAGTFs is made. Until the arrival of this commander, the commander of the primary MAGTF exercises overall command as the composite MAGTF (Forward) commander.

(2) A primary or base MAGTF must be selected. This is necessary to ensure unity of command. It provides for the possibly delayed arrival of the designated composite MAGTF commander and also establishes who will be the first commanders of the composite GCE, ACE, and CSSE. Arrival order and force capabilities are key considerations in selection of the primary or base MAGTF. Specifically, the inherent capabilities of the deploying MAGTFs, their speed or mode of transit, existing command relationships (e.g., CATF/CLF or CINC/JTF designations), and any deficiencies in interoperability and standardization must be considered and accommodated. In most cases the first MAGTF to arrive ashore should be the primary MAGTF.

(3) Geography and future intentions will affect the degree of integration. The overall size of the objective area, distances between deploying MAGTFs, and/or natural barriers may limit or dictate to what extent arriving forces can be integrated. Our plans for the future use of one or more of the MAGTFs may also determine how much integration occurs.

(4) The operational environment will affect the rate of transition. While the composite MAGTF will obviously be better organized to fight once the transition process has fully taken place, any commitment to combat will have an adverse impact on the speed of such an effort. That is, despite the advantages of reorganization, it will be difficult to do so under fire. As a result, acceptable interim steps or stages of integration must be planned and carried out as the intensity of hostilities allows. Hostilities may also affect the time or rate at which augmentation arrives.

c. Key to the Concept -- The Composite MAGTF (Forward). An important aspect in the establishment of a composite MAGTF is the designation of the composite MAGTF (Forward). Specifically, we would employ either a MAF (Forward) or a MAB (Forward).

(1) MAF (Forward). As soon as a determination is made that a MAF-sized force will be required (ideally, before departure for the objective area), one of the arriving MAB headquarters is immediately selected as the primary or base MAB and designated as the MAF (Forward) by the cognizant FMF or MAF commander. Its headquarters then serves as the base upon which the subsequently deployed MAF nucleus headquarters builds, thus creating the fully operational MAF headquarters as envisioned by our permanent MAGTF headquarters concept. The MAF (Forward) becomes the MAF upon the arrival in the objective area of the MAF commander. Whenever possible, we should plan for the early arrival of the MAF commander and the early deployment of the MAF nucleus headquarters. All Marine forces deployed to the objective area will be assigned to the MAF/MAF (Forward). Of particular importance, as far as our relationship with higher or external headquarters is concerned, is that the composite MAGTF being committed always be viewed as a MAF. Designation of the MAF (Forward) should help in this regard; it should therefore both facilitate

unity of command within the composite force and also reduce the risk of the MAGTF being split by a joint or combined commander.

(2) MAB (Forward). Once designated (see alternatives below), the MAB (Forward) headquarters will serve as the component upon which the remainder of the MAB headquarters is built. The MAB (Forward) becomes the MAB upon the arrival (as early as possible) in the objective area of the MAB commander. All Marine forces deployed to the objective area will be assigned to the MAB/MAB (Forward). Particularly important again, as far as higher or external headquarters is concerned, is the fact that the MAGTF being committed is identified as a MAB. (If the mission expands, the MAB might subsequently transition with other forces into a composite MAF.) Early designation of the MAB (Forward) should therefore facilitate unity of command within the composite force and reduce the risk of the MAGTF being split. When a composite MAB is required, one of two alternatives will be employed to determine the MAB (Forward).

(a) MAB plus MAU. When a larger MAB is going to be composited from a MAB and a MAU, the MAU headquarters, if it precedes the MAB into the objective area, is designated as the MAB (Forward). This will be done by the cognizant FMF, MAF or MAB commander. However, if the MAB arrives first, its advance party will be the MAB (Forward).

(b) MAU plus MAU. When a MAB is going to be composited from two or more MAUs, one of the arriving MAUs is immediately selected as the primary or base MAU and designated as the MAB (Forward). This will be done by the cognizant FMF, MAF or MAB commander.

d. The "Deadly Deltas" Must Be Considered. "Deadly deltas" are defined as the additional resources (augmentation) required in the objective area to make up for deficiencies in combat power, organizational structure, and sustainability in the initial composite MAGTF. There is a substantial difference between, for example, two typical MABs and a typical MAF. In the case of forces derived from the MAGTF Lift Model, the lift required to bring in the augmentation necessary to produce a full MAF from two MABs approximates 2100 C-141 equivalent sorties. See Addendum V for a more complete explanation and derivation of this number. Because of the significant size of the "deltas," and because both sea and airlift are likely to be constrained, there is a significant probability that the composite force will have to live with "what you've got now is all you will get until D+?". We should remember that a MAB has a Fly-in-Echelon which itself will be competing for limited sorties. Further, we will almost certainly have to move some if not most of the "deltas" by sea. Thus, there must be careful scrutiny to ensure that these "deadly deltas" are prioritized throughout the planning and deployment phases for movement as lift becomes available. At the same time, the commander must be realistic in deciding which parts of the "deadly deltas," i.e., what personnel, equipment or supplies, are really necessary to accomplish the mission. He must base the composite MAGTF's augmentation requirements on his analysis of the mission. In some situations, additional ground mobility vehicles or aircraft may have first priority. Under different circumstances, the most immediate requirement may be for sustaining supplies or an improved maintenance capability, while in still other cases more infantry may be the most critical need. But in virtually all cases, there will be a high priority requirement for additional headquarters augmentation (MAF, division, wing,

FSSG, etc.) with more command and control assets (MACCS, FSCC, etc.). These headquarters are necessary if we expect to complete the constitution phase of the transitioning process and to see the emergence of a fully conventional, single MAGTF. The key is to plan for the rapid establishment of the composite MAGTF's minimum essential functional capabilities, with the remainder of the augmentation prioritized to come forward in follow-on shipping. The first effort at prioritizing these deltas was accomplished by I MAF during its CPX 1-85 (see Addendum V). It must be remembered that the full range of MAGTF capabilities, such as substantial self-sustainability, will not be available until all the "deadly deltas" have arrived.

4. Composite MAGTF Cases. There are many possible combinations of MAGTFs that may be composited. Size, origin, and deployment means are all variables in these combinations. Three generic cases are presented in addenda. First, the major cases of forming a composite MAGTF by using two MABS, and then two MAUs are examined. Then the lesser case of using a MAB and a MAU to form a larger MAB is treated. This latter case is termed lesser because it is much easier to form a composite MAGTF from one larger and one smaller MAGTF than it is to form one from two like-sized MAGTFs. This is true because the larger MAGTF simply absorbs the smaller one, and also, in the like-sized MAGTF cases, there is a hard requirement for augmentation to constitute the composite MAGTF headquarters.

a. MAB Plus MAB Case. In many contingencies it will be necessary to composite deploying MABS in order to form and fight as a conventional, single MAF. The MAB plus MAB case may be most difficult because of the substantial size and complexity of the deploying MAGTFs and the intense combat to which they may be committed. If the MABS are deployed from different MAFs or even FMFs, and/or if they use different deployment means, then the complexity of the compositing process increases. The key decision will be the selection of the primary MAB, which includes its designation as the MAF (Forward). See Addendum I for this case.

b. MAU Plus MAU Case. MAUs are the Marine Corps' principal peacetime forward deployed force. At least two MAUs, one in the Western Pacific and one in the Mediterranean, are deployed at all times. At certain other times, two, three or even more additional MAUs may exist. Thus there is a possibility that two or more of these MAGTFs could be called upon to execute a mission that requires them to composite to form a composite MAB. The MAU plus MAU case, which is generally analogous to the MAB plus MAB case, is presented in Addendum II.

c. MAB Plus MAU Case. The MAB plus MAU case reflects the fact that deploying MABS and MAUs may also be directed to composite to form a larger MAB. This case also serves to indicate the general process to be followed when other larger MAGTFs, e.g., a MAF or MAF(-), composite with smaller ones such as a MAB. See Addendum III for its discussion.

ADDENDUM I

MAB Plus MAB Case

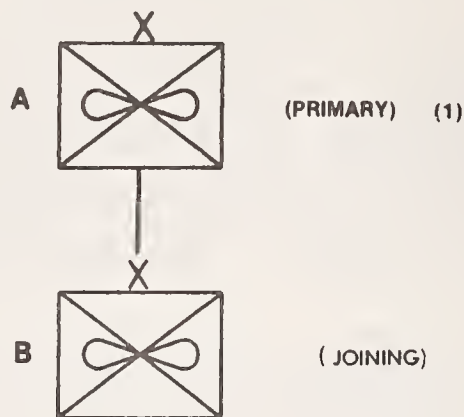
1. Purpose. This addendum addresses the guidelines to be followed in the formation of a composite MAF starting from two MABs. The process is applicable to both amphibious and prepositioned forces and is suited to compositing MABs from different MAFs or even different FMEs. It takes advantage of, but does not rely on, the availability of augmentation forces.

2. Process. The transitioning process begins in the expansion phase when the proximity of two MABs, either temporal or geographic, is such that to ensure unity of command the formation of a composite MAF is required. One of the MABs is selected to be the primary or base MAB. The compositing directive (see Addendum X), which forms the composite MAF, designates the primary MAB as MAF (Forward). Table I-1 provides considerations for selection of the primary MAB and designation of the MAF (Forward).

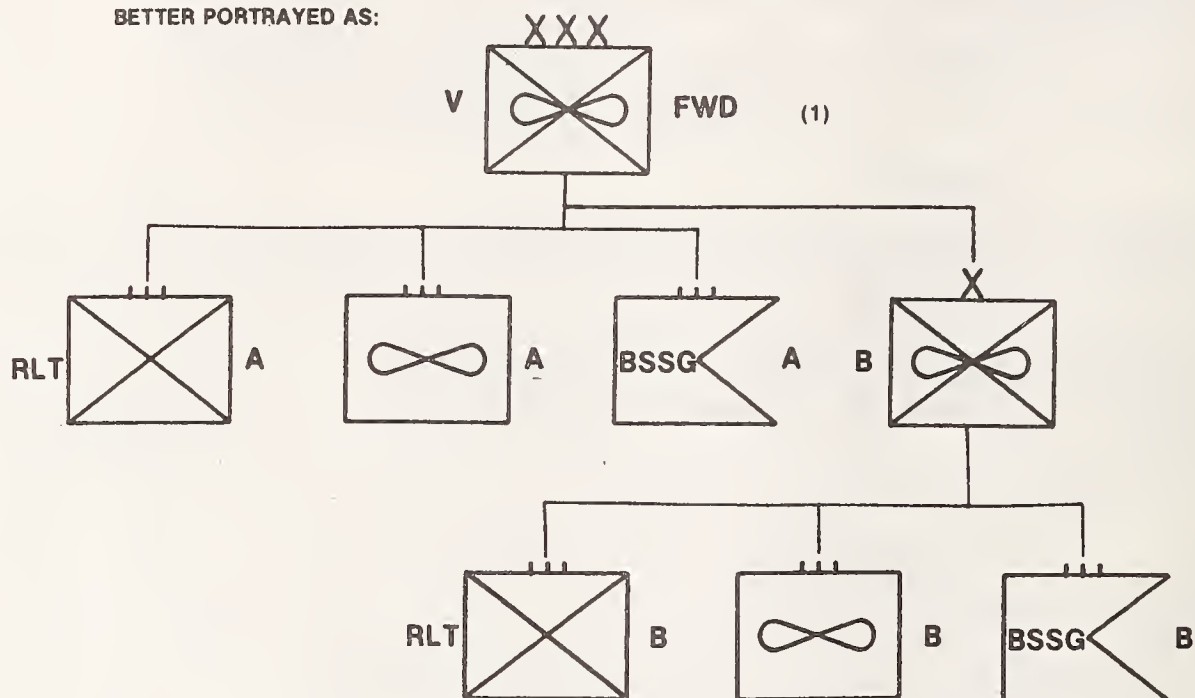
Table I-1. Considerations for Selecting the Primary MAB
and Designating the MAF (Forward)

<u>When</u>	<u>Decision</u>	<u>Impact</u>
One MAB arrives first	Lead MAB selected as primary MAB and designated as MAF (Fwd)	Possible seniority inversion
Two MABs embarked for amphibious operations	MAB with CG designated as CLF selected as primary MAB and designated as MAF (Fwd)	Possible seniority inversion - Coordination with CATF required
One MAB demonstrably more capable	More capable MAB selected as primary MAB and designated as MAF (Fwd)	Possible seniority inversion
Prior relationship between one MAB and the CINC/CJTF	MAB with prior relationship selected as primary MAB and designated as MAF (Fwd)	Possible seniority inversion - Coordination with CINC/CJTF required
MABs arrive together with similar capabilities	MAB with better aviation command and control capabilities selected as primary MAB and designated as MAF (Fwd)	Possible seniority inversion - Effect on ground combat, CSS operations must be considered

Operational control of the other MAB passes to the MAF (Forward). See Figure I-1. The precise timing and procedures for passing OPCON will be delineated in the compositing directive. The commander of the primary MAB is the MAF (Forward) commander and is the overall commander of Marine forces in the objective area until arrival of the ultimate composite MAF commander. Whenever the MAF commander arrives, the MAF (Forward) becomes the MAF, although it is initially a MAF comprised of the elements of just two brigades.



BETTER PORTRAYED AS:



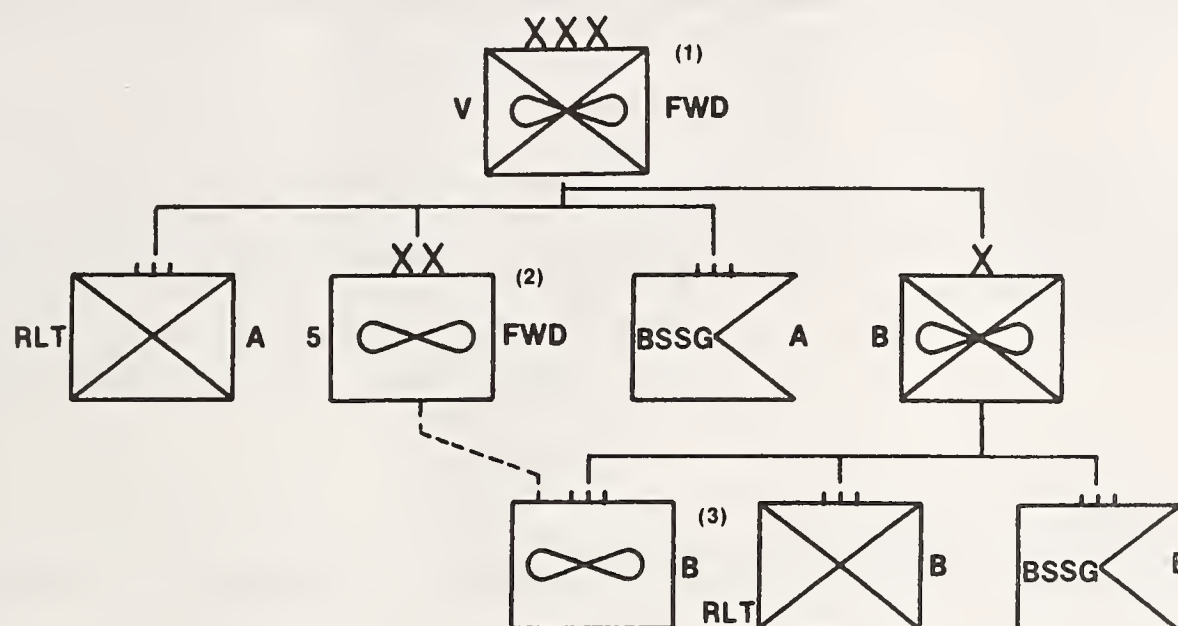
(1) MAB "A" is MAF (Fwd)

Figure I-1. Subordinating One MAB to Another, Expansion Phase

At this point the integration phase begins. Note that the MAF (Forward) headquarters must now perform fire support coordination because it is the lowest common headquarters above the two ground maneuver elements (its own RLT, and the RLT of the joining MAB). See Addendum VI for an expanded consideration of the fire support coordination requirement.

During this phase, the first major evolution is integration of aviation assets. This step is important because aviation provides optimum support when organized under centralized command and control. A further motive is that the limited inventory quantities and large lift requirements of the Marine air command and control system make it probable that the two MABs will not have the same air command and control capability.

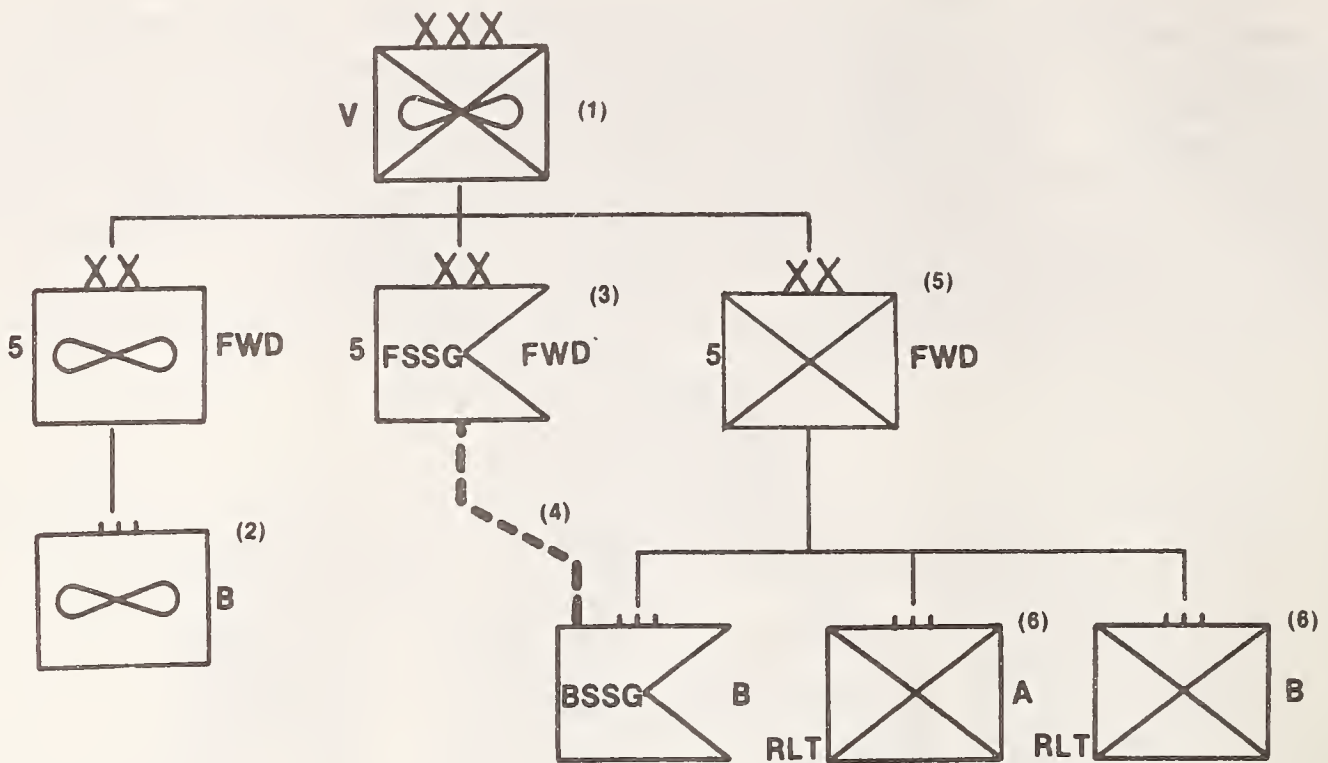
To centralize command and control of aviation, the ACE of the joining MAB is made responsive to the ACE of the primary MAB. The commander of the primary MAGTF's ACE becomes the commander of the composite ACE and tactical air commander of the composite MAF. His headquarters is now designated the Wing (Forward). See Figure I-2. The composite ACE commander, regardless of personal seniority, exercises his inherent authority and draws upon the assets of both ACEs to centralize command and control, anti-air warfare and other aviation functions as may be both feasible and necessary. See Addendum VII for a more in-depth examination of aviation considerations.



- (1) Formerly MAB "A" Headquarters
- (2) Commander of primary MAB's ACE "A" is now the first commander of the composite ACE, tactical air commander for the composite MAF, and commander of Wing (Fwd).
- (3) Joining MAB's ACE "B" responsive to Wing (Fwd).

Figure I-2. Tactical Air Commander and Wing (Fwd) Established, Integration Phase

Next, the integration of the ground combat elements should commence. This occurs under the joining MAB commander, who becomes the interim commander of the GCE for the composite force. His headquarters is designated the Division (Forward), although there is no intention for it to take on the full administrative and logistic responsibilities associated with a division headquarters. See Figure I-3. The decision to use the joining MAB headquarters as the interim headquarters for the composite GCE frees the primary MAB headquarters of the necessity to plan and conduct ground combat operations in detail. It makes effective use of the general officer and the trained staff team of the joining MAB headquarters. This joining MAB headquarters has the ability to control a task force that, when necessary (e.g., when the composite force is operating over a large geographic area), may include both aviation and combat service support elements. The decision also provides a very logical choice for the alternate composite MAF headquarters. Implementation of this decision will cause the joining MAB headquarters to perform fire support coordination because of the presence of two subordinate ground maneuver elements directly under it.



- (1) MAF Commander has arrived.
- (2) ACE "B" now fully subordinated to Wing (Fwd).
- (3) Primary BSSG becomes FSSG (Fwd) and its commander the first commander of the CSSE of the composite MAF.
- (4) Initial coordination link established for such things as critical item inventory control.
- (5) Joining MAB commander is interim commander of the ground combat element of the composite MAF and his HQ is now Division (Fwd).
- (6) Two ground maneuver elements directly under joining MAB.

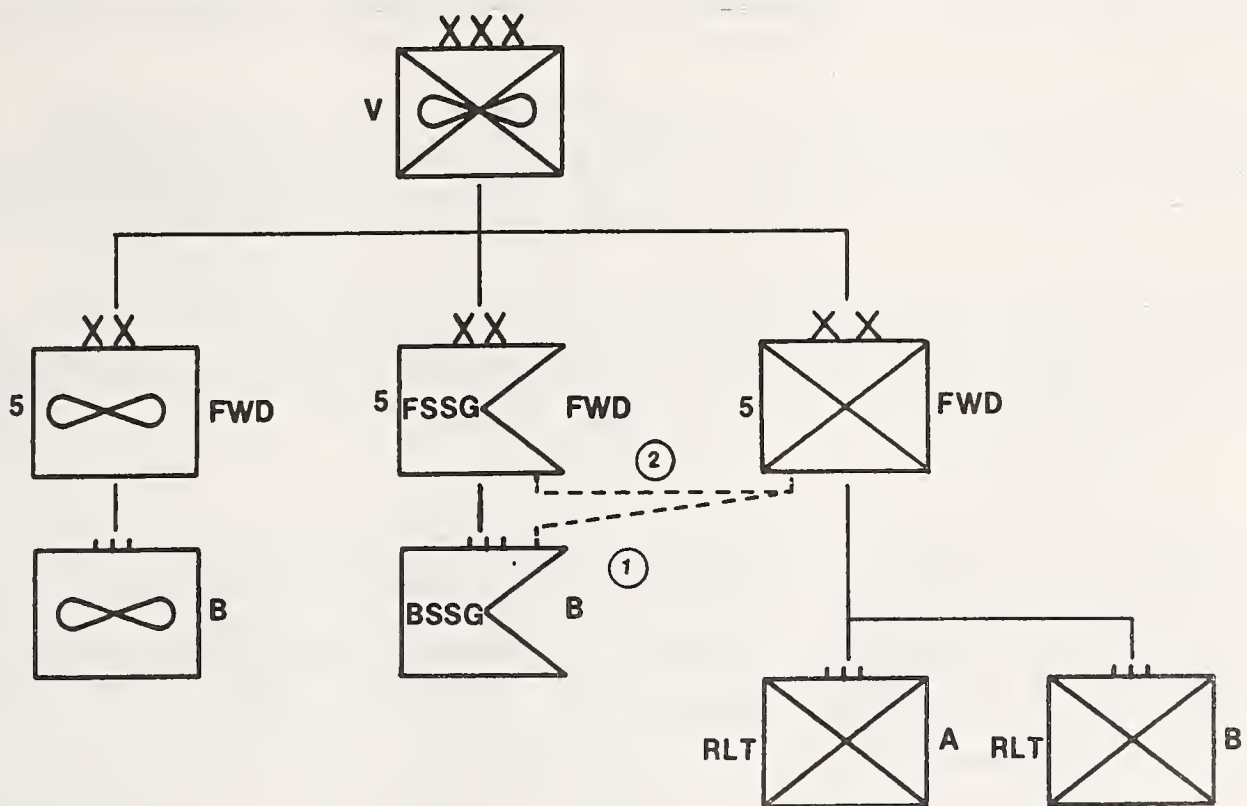
Figure I-3. Division (Forward) and FSSG (Forward) Established, Integration Phase

There are other alternatives or options for command of the GCEs during the integration phase, prior to the arrival of the division headquarters. The two RLTs could operate directly under the primary MAB/MAF (Forward) headquarters. This option would free the other MAB headquarters early in the operation. However, it would also require the composite force headquarters to enlarge its span of control, to plan and conduct ground combat operations in detail and to continue to perform fire support coordination. Additionally, this option calls into question the need for an overall ground combat element headquarters in MAGTF doctrine.

Another alternative for the integration of the GCEs would be to subordinate the joining RLT to the primary RLT. We would then designate the primary RLT as Division (Forward) and its commander as the interim commander of the composite GCE. This option parallels the approach taken to consolidate command and control in the aviation and combat service support areas. However, this alternative could very well overtax the capabilities of the primary RLT headquarters. The option also basically ignores the geographically decentralized, parallel and dynamic nature of most ground combat operations.

Considering the advantages and disadvantages of these alternatives, employing the joining MAGTF headquarters as the interim composite GCE headquarters is normally the preferred option. This is particularly true in this case of a MAB plus a MAB, where significant ground combat operations are possible. If a situation arises where the joining MAB headquarters is not available or must be freed early for employment elsewhere, then subordinating all the RLTs directly to the primary MAB/MAF(Forward) headquarters would be an acceptable alternative.

Concurrently, the initial link between the BSSGs is also established as integration of combat service support functions commences. Similar to the aviation integration process, this step is accomplished by subordinating the BSSG of the joining MAB to that of the primary MAB, regardless of their commanders' seniority, and designating the primary BSSG as FSSG (Forward) and its commander as commander of the composite CSSE. See Figures I-3 and I-4. Centralization of critical item inventory control, general support maintenance, hospitalization and medical evacuation should occur early. These may be followed by similar action, as feasible, with other logistic functions. Addendum VIII provides additional insight into the concept of composite CSS.



- (1) Joining MAB's BSSG now fully subordinated to FSSG (Fwd).
- (2) Direct support relationships retained as necessary by contact teams and DS platoons.

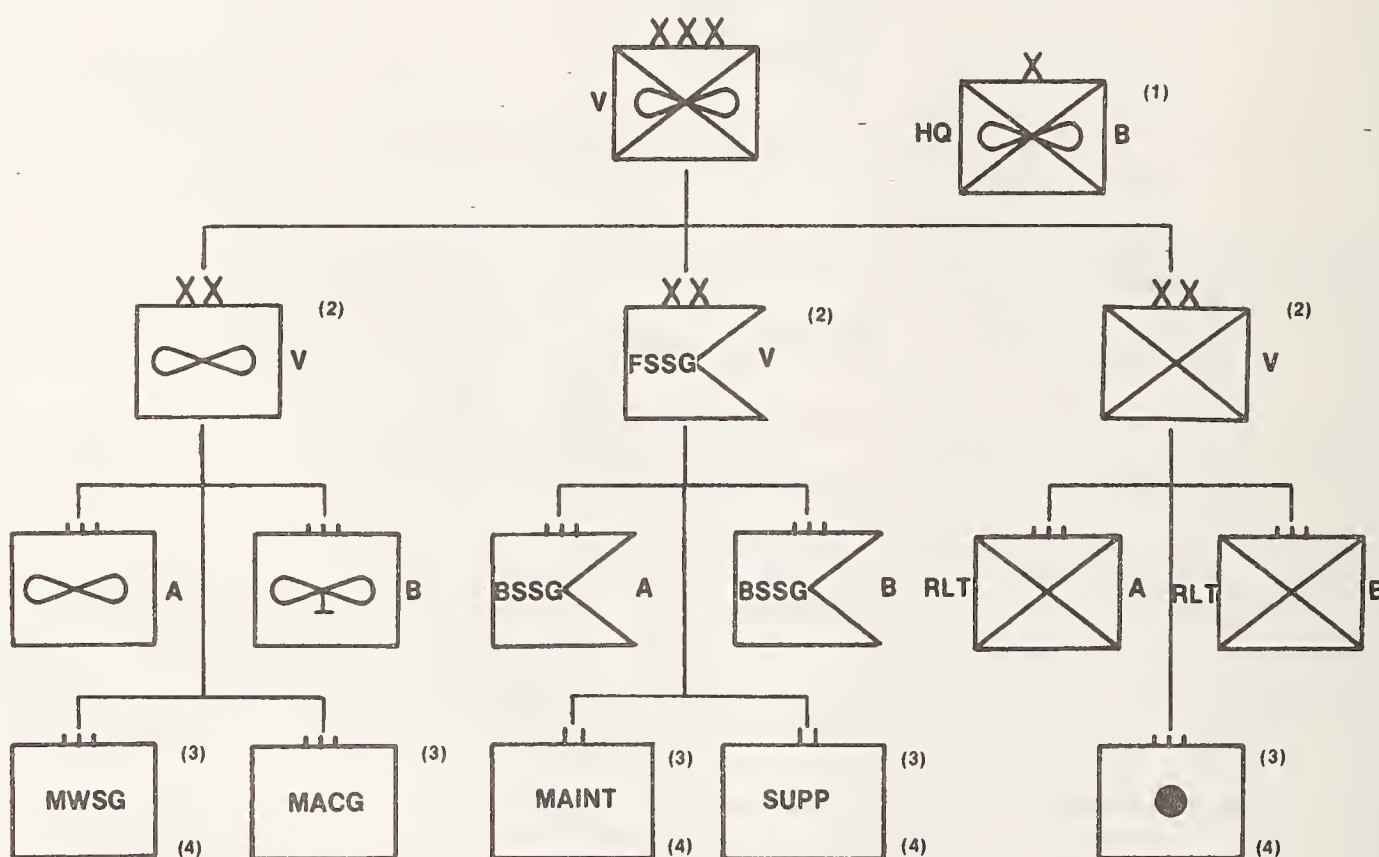
Figure I-4. Conventional Command Channels Fully Established, Integration Phase

As a consequence of these actions, the composite MAF commander now has single command channels:

- through the primary ACE/Wing (Forward), for aviation;

- through the primary BSSG/FSSG (Forward), for combat service support; and
- through the joining MAB Headquarters/Division (Forward), for ground combat.

The arrival of augmentation forces starts the constitution phase. This could well occur while integration (or even expansion) is still in progress. Augmentation is necessary to transition the composite force into the command and control structure necessary for the emergence of a conventional single MAGTF. For this purpose, key augmentation organizations include the MAF nucleus headquarters, the headquarters of the wing, division, and FSSG, and the artillery regiment, MACG, and MWSG headquarters. These organizations provide some of the major elements necessary to achieve a conventional command and control structure. See Figure I-5. Without them, reorganization of the composite MAF is likely to be quite limited. Other augmentation forces arrive as the situation permits or as they are required, and fall in on their traditional places within this structure. Arrival of the division headquarters frees the joining MAB headquarters for other operations. The composite MAF has now taken on the appearance of a conventional MAF, although further augmentation (beyond that illustrated in Figure I-5) will be necessary



- (1) Joining MAB headquarters available for other operations.
- (2) Conventional major headquarters structure established.
- (3) Some key augmentation organizations.
- (4) Constitution is depicted here at an intermediate stage -- additional aircraft groups, regiment(s), and battalions have yet to arrive.

Figure I-5. Composite MAF Augmentation, Constitution Phase

for the composite force to gain a gull conventional MAF structure and capability. Administrative considerations are a major factor during this and the integration phase of the transitioning process and are addressed further in Addendum IX.

3. Operating Principles. From the process of transitioning two MABs into a composite MAF, several operating principles can be drawn.

a. Selection of the primary MAB is the key decision. The selection of the primary MAB determines the primary ACE/Wing (Forward), primary CSSE/FSSG (Forward), and the joining MAB Headquarters/Division (Forward).

b. To ensure unity of command, the primary MAB commander should immediately be assigned as MAF (Forward) commander. He is the overall commander of forces in the objective area until arrival of the MAF commander.

c. Personal seniority is not an overriding considerations; far more important is the ability to keep established, trained-for-combat command and staff teams together. This is exemplified by the choice of initial element commanders within the composite MAF. Of course, temporary seniority inversions can be selectively removed by ensuring early arrival of key senior officers, e.g., an AWC to command the Wing (Forward).

d. Aviation should be the first area of responsibility integrated. Aviation provides optimum support when organized and employed under centralized command and control. However, not all aviation functions may be immediately integrated; this is situationally dependent.

e. MAB headquarters must have the capability to perform fire support coordination when they have two ground maneuver elements directly under them. The permanent MAB headquarters table of organization contains sufficient aviation, artillery and naval gunfire personnel to staff the nucleus of an FSCC.

f. Effective operational integration of the composite MAF can take place before the arrival of augmentation forces. Composite element commanders have been named and have the authority to centralize control of necessary functions. Reorganization will be limited, and the composite MAF will be far short of a typical MAF in combat power and sustainability. Its increased capability from integration is important, however, because of the possibility that the force may have to fight in a "come as you are" mode for a period of time.

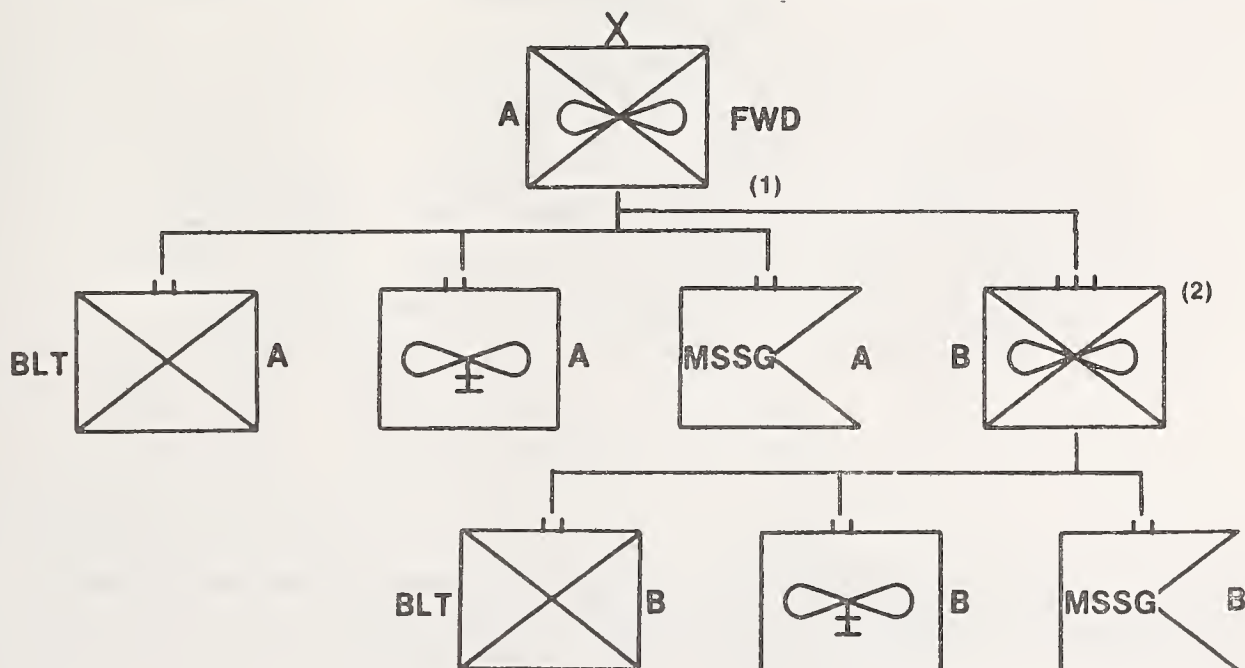
MAU Plus MAU Case

1. Purpose. This addendum addresses the guidelines to be followed when forming a composite MAB starting with two MAUs. The process is applicable to compositing MAUs from different MAFs or even different FMFs. In many circumstances the process of forming a composite MAB will be an intermediate step to forming a composite MAF.

2. Process. The unique challenge in this case is the typical MAU's dependence on supporting amphibious ships for sea-based communications, administration, aviation and logistic support. The MAU's short-term sustainability and limited capacity for combat operations are also significant considerations, and all these factors mandate that the addition of one MAU to another MAU without significant augmentation yields a force that is still sea-based. The emerging composite MAB is small (some would call it still a MAU) and remains capable of only short-term combat operations.

Other than these important differences, this case proceeds through the transition phases in a manner generally similar to that of the MAB plus MAB.

In the expansion phase, the joining MAU is immediately subordinated to the primary MAU, which is designated the MAB (Forward). See Figure II-1. The selection of the primary MAU is again the key decision, and Table II-1 provides considerations in making this decision. The primary MAU commander becomes the CLF if a CATF has been assigned. The primary MAU headquarters, as lowest common headquarters, must be able to perform fire support coordination because it is the lowest common headquarters above the two ground maneuver elements (BLTs).



(1) Also MAU "A".

(2) MAU "B" subordinated to MAU "A".

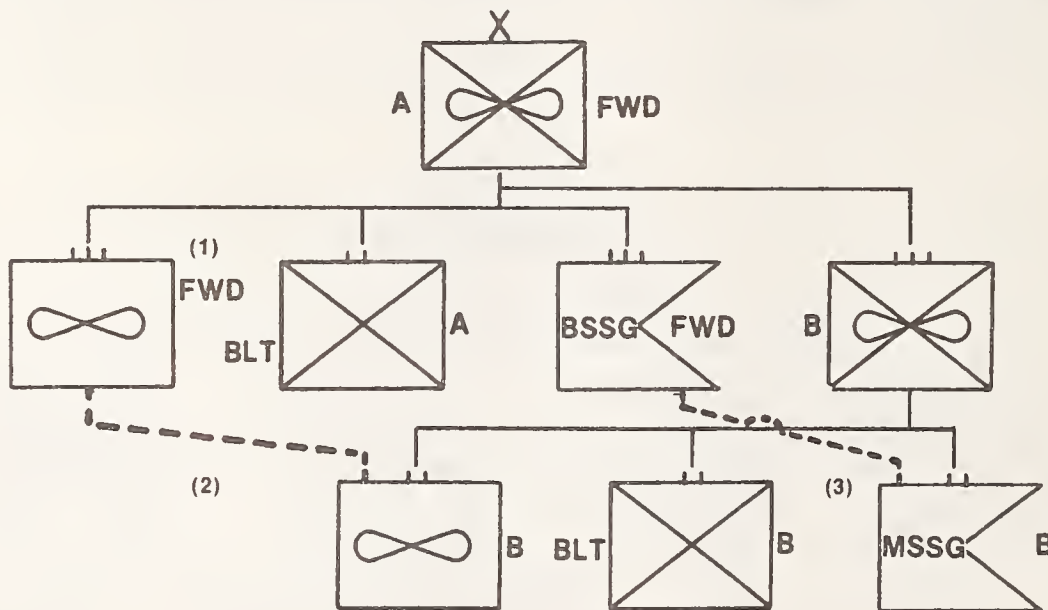
Figure II-1. Transitioning Two MAUs, Expansion Phase

Table II-1. Considerations for Selecting the Primary MAU and Designating the MAB (Forward)

<u>When</u>	<u>Decision</u>	<u>Impact</u>
One MAU arrives first	Lead MAU selected as primary MAU and designated as MAB (Fwd)	Possible seniority inversion
Two MAUs embarked for amphibious operations	MAU with CO designated as CLF selected as primary MAU and designated as MAB (Fwd)	Possible seniority inversion - Coordination with CATF required
One MAU demonstrably more capable	More capable MAU selected as primary MAU and designated as MAB (Fwd)	Possible seniority inversion

The early integration of aviation is a high priority, probably made even more essential as the result of the amphibious task force's likely TACC/SACC/HDC centralization aboard the flagship. Therefore, the ACE of the joining MAU is made responsive to the ACE of the primary MAU. The primary MAU's ACE commander, regardless of seniority, serves as composite ACE commander/MAG (Forward) commander for the composite force. See Figure II-2.

Next, a link between the two MSSGs is established. The primary MAU's MSSG is designated BSSG (Forward) and its commander, regardless of seniority, becomes the commander of the combat service support element of the composite MAB. See Figure II-2.

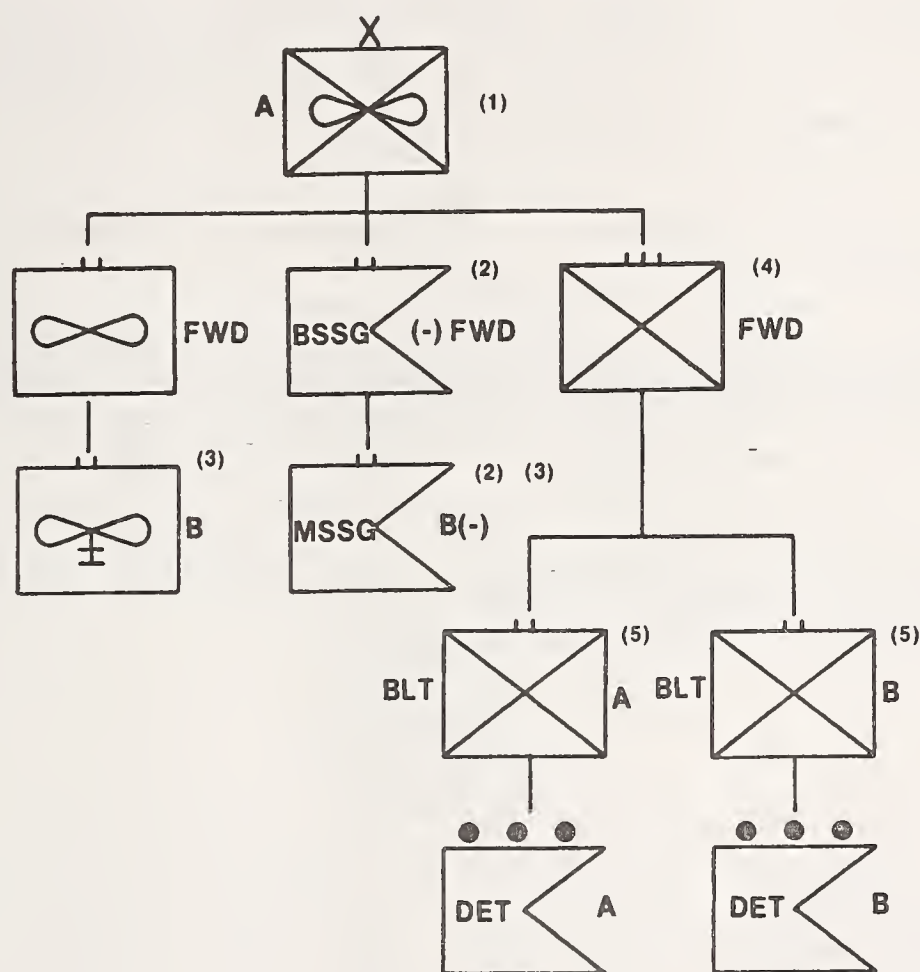


- (1) Commander of primary MAU's ACE is also tactical air commander for composite MAB.
- (2) Joining MAU's ACE responsive to primary MAU's ACE/MAG (Fwd).
- (3) Joining MAU's MSSG responsive to primary MAU's MSSG/BSSG (Fwd).

Figure II-2. Integrating Aviation and Combat Service Support, Integration Phase

Then in many cases, the primary MAU's GCE (BLT) should become OPCON to the joining MAU headquarters, whose commander becomes the commander of the ground combat element/Regiment (Forward) of the composite MAB. Such an arrangement will not always be possible, however, as MAU headquarters are very small, and it may be necessary to merge them to provide operational sustainability at the composite force level. In that event, the composite MAB (Forward) headquarters will control the two MAU GCEs directly.

To facilitate continuity of logistic support, it is also possible that CSS detachments would be attached to the two ground maneuver elements. See Figure II-3. This situation might be particularly appropriate if only the forces of the composite GCE displace ashore.



- (1) MAB commander has arrived.
- (2) Both MSSGs have detachments out - situationally dependent.
- (3) Joining MAU's ACE and MSSG subordinated to primary MAU's ACE/MAG (Fwd) and MSSG/BSSG (Fwd), respectively.
- (4) Joining MAU commander is commander of the GCE for composite MAB.
- (5) Two ground maneuver elements directly under joining MAU Hq.

Figure II-3. Composite MAB Evolves, Single Command Channels Established, Integration Phase

Although not diagrammed, the joining MAU may, in some cases, also retain a limited aviation capability. In any event, the joining MAU headquarters must be able to coordinate fire support whenever it is the composite GCE headquarters and has two ground maneuver elements directly under it.

Any expansion of the capability depicted in Figure II-3 requires significant augmentation of the composite MAB from external sources. The limitations imposed by its sea-based nature require the arrival of a truly substantial "deadly delta" if the ship-to-shore link is to be severed. See Addendum V for an estimation of the delta.

A MAB, MAG, BSSG, and RLT headquarters, and an artillery battalion (-) can be introduced, and the process can then proceed in the same direction as in the constitution phase of the MAB plus MAB case. This is only one alternative, one that will yield a small MAB with a conventional structure.

The large size of the "deadly delta" required to constitute a more typical MAB may make it more desirable to deploy an entire MAB-sized MAGTF. Transitioning of this newly arriving MAB and the already present composite MAB into a small composite MAF would then be accomplished using the process previously described in the MAB plus MAB case.

3. Operating Principles. There is only one new operating principle in the MAU plus MAU case.

a. Without truly substantial augmentation, the composite MAB formed from two MAUs will indeed be a small one with limited capabilities. If a larger force is needed, the "deadly delta" problem might be better resolved by deployment of a MAB and formation of a small composite MAF.

b. Deserving of re-emphasis, however, is the principle that selection of the primary MAU is the key decision. This determines the primary ACE/MAG (Forward), primary CSSE/BSSG (Forward), and where the joining MAU is so tasked, the composite GCE/Regiment (Forward).

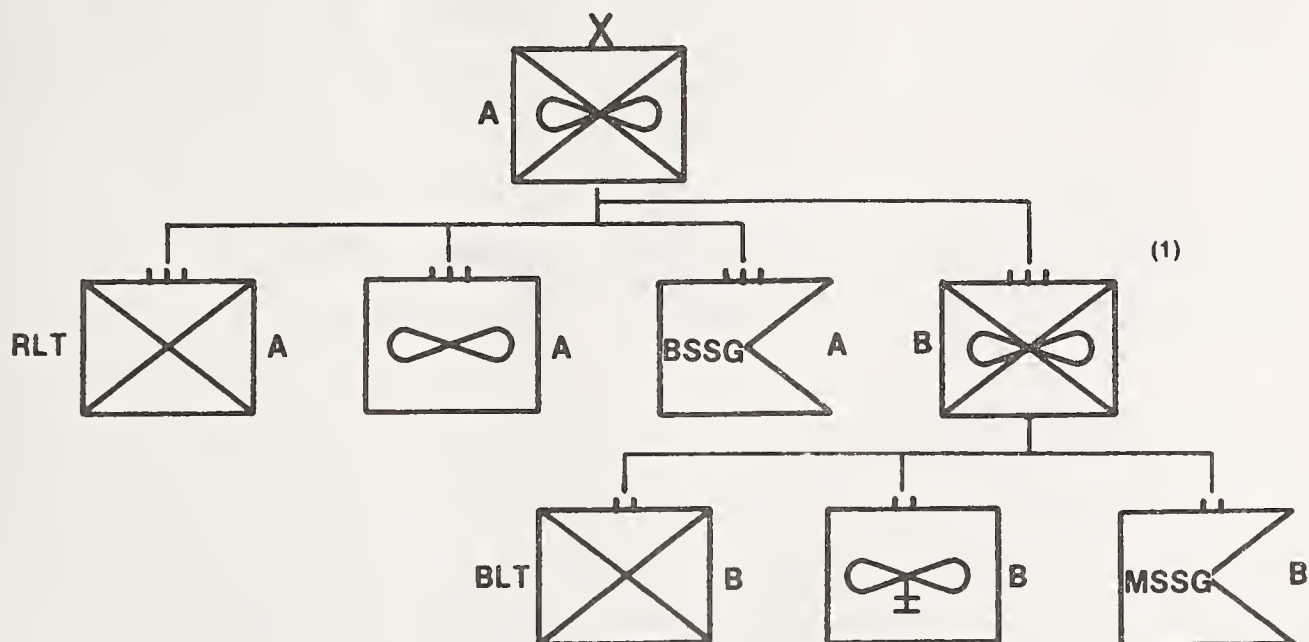
ADDENDUM III

MAB Plus MAU Case

1. Purpose. This addendum addresses the guidelines to be followed when forming a MAB and a MAU into a larger, composite MAB. This situation might well arise when a forward deployed MAU is joined by either an amphibious or an MPS MAB.

2. Process. The degree of difficulty in forming a composite force is reduced from the cases where two like-sized MAGTFs are composited. Primarily, this is so because the two forces are of unequal size, and it should be clear that the larger will always absorb the smaller, with individual elements of the smaller force being absorbed by like elements of the larger force. Further, the composite force can be administratively and operationally consolidated without deploying any new headquarters. However, general interoperability and standardization problems which may occur, are addressed in Addendum XI.

Initially, the MAU is subordinated intact to the MAB. See Figure III-1. This is true regardless of which MAGTF is the lead force (and prospects are excellent that the MAU will be in the lead). Subordination occurs when the proximity of forces, either temporal or geographic, is such as to require a composite MAB to ensure unity of command. If the MAU leads, its commander is additionally designated as the MAB (Forward) commander. Otherwise the MAB advance party is MAB (Forward). If a CATF/CLF relationship exists involving the MAU commander as CLF, the relationship will remain only until the arrival of the MAB commander, who becomes CLF. Arrival of the MAB commander also causes the MAB (Forward) to be redesignated as the MAB.



(1) MAU subordinated intact to MAB.

Figure III-1. MAB plus MAU, Expansion Phase

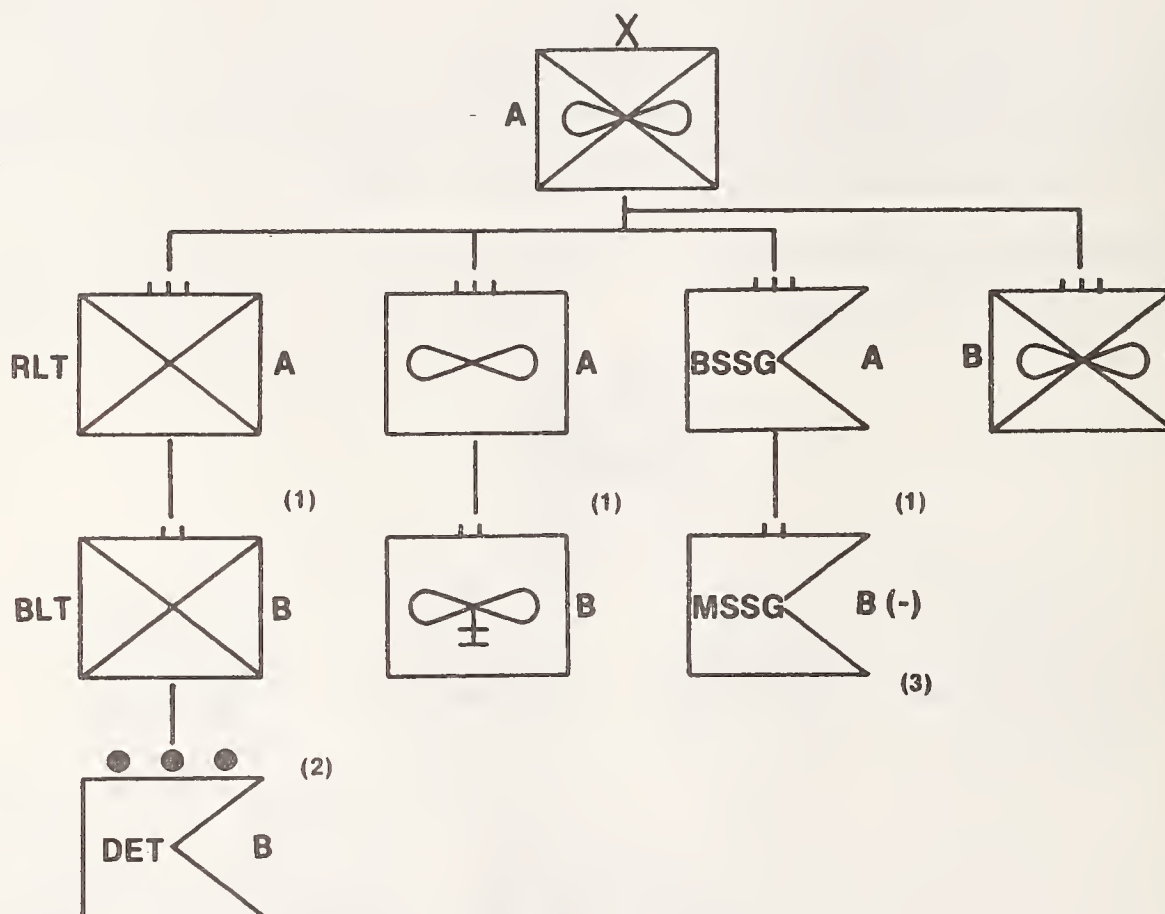
As in the other cases, the integration of aviation efforts receives first priority, and the MAB's ACE commander quickly assumes control of the MAU's ACE. Next, the MAU's GCE and CSSE are each subordinated to the MAB's GCE and CSSE respectively. A detachment from the MAU's CSSE could be attached to the MAU's GCE to ensure continuity of logistical support, but this will be situationally dependent. See Figure III-2. Finally, a conventional larger MAB emerges by fully coalescing the three areas of responsibility and absorbing the MAU headquarters into the MAB headquarters. See Figure III-3.

There is no patent requirement in this case for augmentation forces to arrive in order to complete reorganization of the composite force. That is, a constitution phase is generally unnecessary.

3. Operating Principles. There are two new operating principles in the MAB plus MAU case.

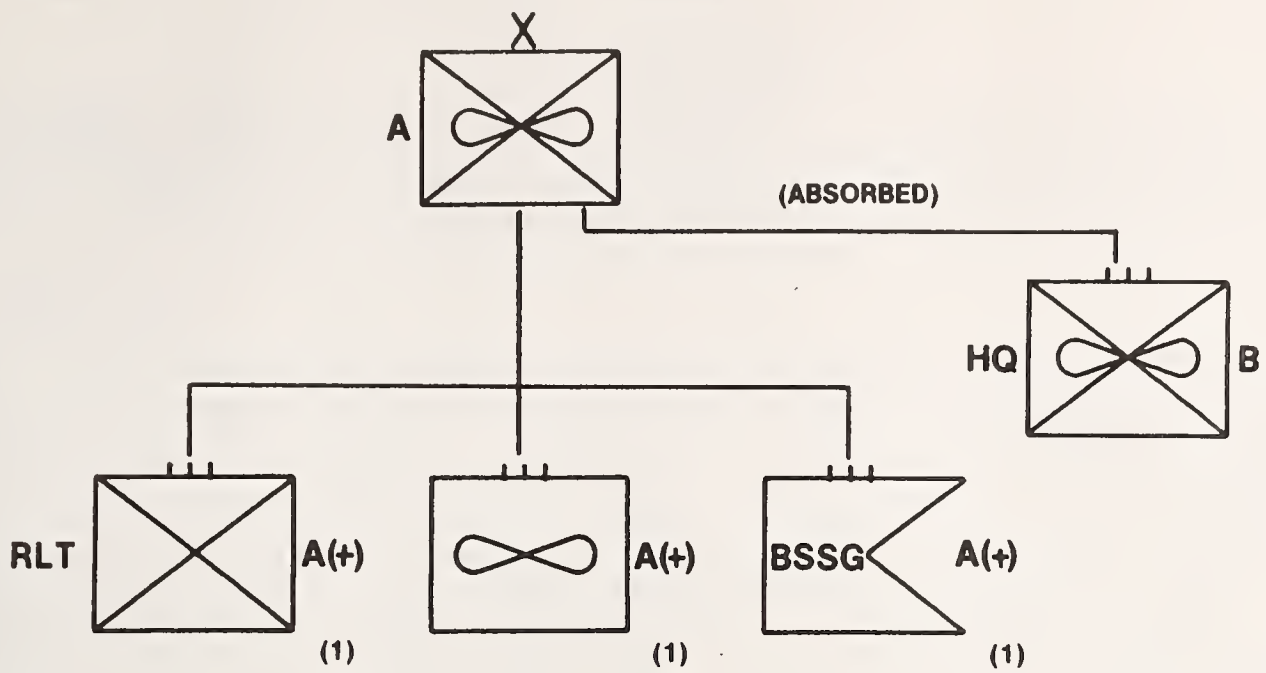
a. The MAU is subordinated to the MAB regardless of their arrival sequence.

b. Control of subordinate elements of the MAU will pass to the equivalent elements of the MAB. For example, the MAB's RLT takes command of the MAU's BLT.



- (1) Elements of MAU subordinated to like elements of MAB.
- (2) CSS detachment attached - situationally dependent.
- (3) MSSG has lost a detachment.

Figure III-2. Integrating the MAU into the MAB



(1) Major elements of MAB are reinforced by like elements of MAU.

Figure III-3. The Conventional Larger MAB Emerges

ADDENDUM IV

NAVY CONSIDERATIONS

1. Purpose. The purpose of this addendum is to discuss Navy-Marine Corps relationships that may affect how and when we form a composite MAGTF. It is included because Navy actions, particularly during amphibious operations, could have a great deal of influence on Marine Corps compositing efforts.

2. Introduction

a. The command relationships between the Commander, Amphibious Task Force (CATF) and the Commander, Landing Force (CLF) within the context of amphibious operations are well defined. Command relationships during maritime prepositioning operations, while still evolving, are expected to be analogous to those between the CATF and the CLF. That is, a Naval Task Force (NTF) will be established for maritime prepositioning operations with an MPS squadron, a Marine brigade and a Navy Support Element (NSE) assigned to it. Once deployed, the Marine brigade will remain under the operational control of the Commander, Naval Task Force (CNTF), at least until it is combat capable. Thereafter, the Marine brigade may chop to another commander for operations ashore.

b. When forming a composite MAGTF from some combination of amphibious and/or maritime prepositioning MAGTFs, it is envisioned that existing Navy-Marine Corps relationships will be changed only enough to accommodate circumstances unique to the compositing concept.

3. Impact of Compositing

a. We now recognize that there are situations where we may have multiple ATFs designated to come together and operate in a single Amphibious Objective Area (AOA). With MPS squadrons and their associated Marine brigades now on line and ready for deployment, there exist still other possibilities. We could easily find ourselves in a situation where a combination of ATFs and maritime prepositioning NTFs are directed to composite forces and conduct a large operation. See Figure IV-1.

b. Nevertheless, it must be remembered that, regardless of the number of variables, the principal concern in every compositing case is unity of command. Under these new and challenging circumstances, every commander should be aware of the key considerations which may influence traditional CATF and CLF command relationships.

4. Key Considerations. Two of the keys to successful compositing during an amphibious operation are careful drafting of the initiating directive and the selection of the primary CATF.

a. Initiating Directive. The initiating directive, issued by a higher commander, should provide instructions for the CATF(s), the CLF(s) and other commanders as necessary. Through this directive, instructions on specific command relationships will be established. It should include information on

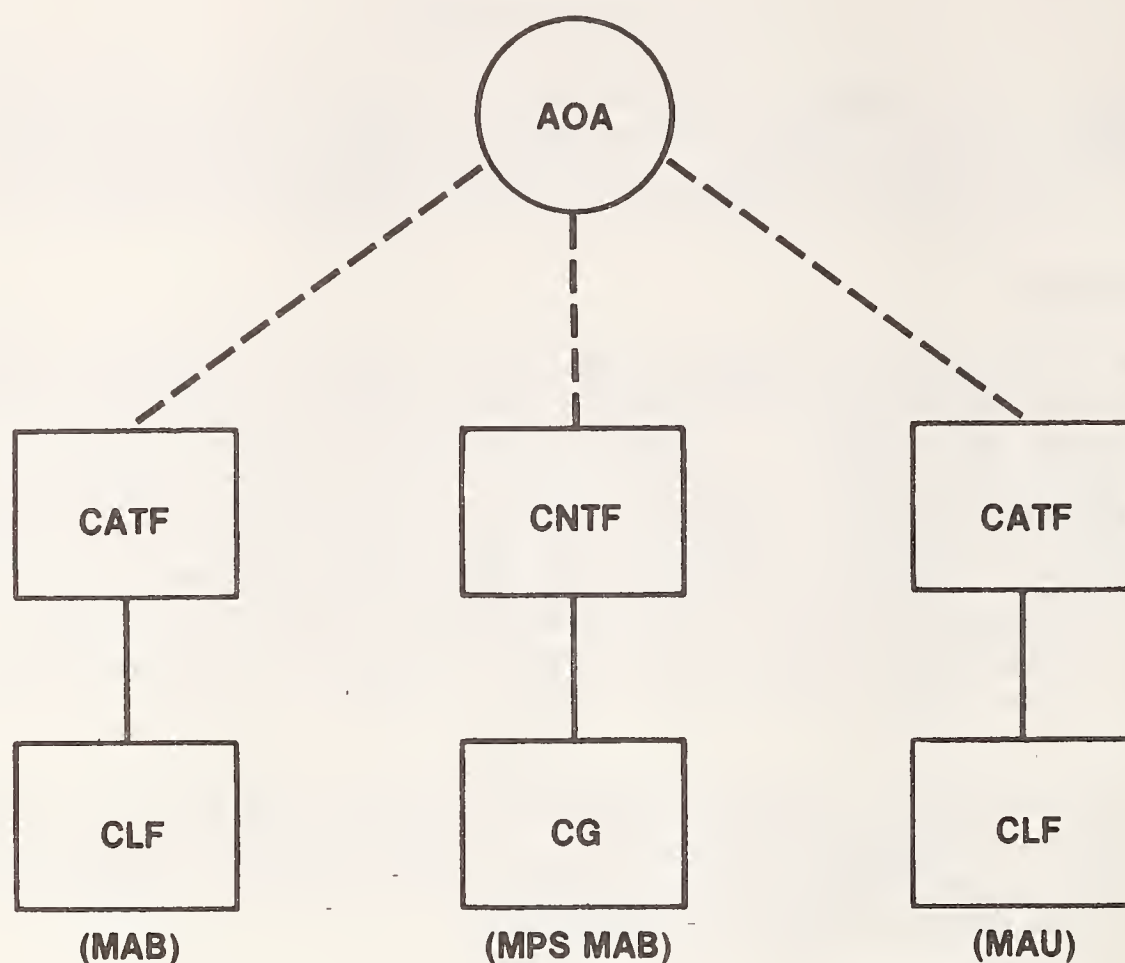


Figure IV-1. Multiple CATFs/CLFs

movement of the ATF(s) to the objective area, the anticipated duration of their operations, and, of course, a definition of the AOA. It may also include special instructions, as required, for command relationships among MAGTFs associated with MPS and land prepositioning, and amphibious MAGTFs to be assigned to the operation.

b. Selection of the Primary CATF. In line with the paramount requirement for unity of command, one of the arriving CATFs must be placed in overall charge within the AOA. Even though there are numerous factors to be considered in the selection of the overall or primary CATF (Table I-1 may be helpful in this regard), arrival order and seniority of the ATF commanders should receive priority consideration. Arrival order may be even more important than seniority when selecting the overall or primary CATF. This would be particularly true if operations have begun prior to the arrival of a second or third ATF.

5. Influence on the Marine Corps. When operating as part of an ATF or an NTF, Marine forces' compositing options will be limited. That is because we do not envision a case where there would properly be a single CATF and multiple CLFs, or multiple CATFs and a single CLF. (Underneath the CATF and CLF, there could be multiple amphibious task group and landing group commanders, with the same numbers of each, in the event of separated landings.) Therefore, in cases where the Navy elects to composite ATFs and/or NTFs and to establish a single CATF/CNTF, then the Marine Corps will quite properly be required to composite its forces and establish a single CLF. If, on the other hand, the situation dictates continuation of multiple CATFs (a circumstance that should occur only if there are multiple AOAs) then the Marine Corps would have a corresponding number of CLFs. In this case, compositing of Marine forces, if desirable, would have to wait until control is passed ashore.

ADDENDUM V

DEADLY DELTAS

1. Purpose. This addendum is included to increase the reader's appreciation of the meaning of "deadly" in the "deadly deltas." The addendum is divided into three parts. Part one addresses the MAF residual or delta remaining after the departure of two MABs. Part two presents the residual or delta for a MAB that has sourced two MAUs. Part three contains I MAF's initial efforts to develop a Fly-in-Echelon that would include the personnel and equipment to staff a fully operational MAF headquarters and, to a somewhat lesser extent, a division, wing and FSSG headquarters.

PART I

DEADLY DELTAS (MAF MINUS TWO MABs)

1. Background. The first "deadly deltas" to be considered are the MAF residual remaining after the departure of two MABs. Such a residual represents those elements from which one might draw augmentation for the composite MAF formed in the MAB-plus-MAB case. It quantifies what has been left behind in the typical MAF after the departure of its two MABs (remembering that the MABs may have gone to two different locations, and a composite MAF may be formed using MABs from different MAFs or even different FMFs). The remainder obtained by subtracting two MABs from the MAF is a reasonable representation of a generic MAF residual, and the process is readily replicated in future examinations of this lift requirement.

2. Method. The data for the MAGTFs were extracted from the MAGTF Lift Model (data base dated 31 Jan 1984), and all comparisons except the MAF Headquarters nucleus are based on the "MAF minus two MABs" logic. In the case of the MAF Headquarters nucleus, only one MAB Headquarters was subtracted from the MAF Headquarters in keeping with the permanent MAGTF headquarters concept. No effort was made to conduct a detailed validation of the detachments in the MAB except where errors were evident. Examples of changes are the elimination of the cadre Marginal Terrain Vehicle Company and substitution of a CH-53E squadron for one CH-53A/D squadron. Where the subtraction resulted in a negative number (meaning that the sum of the two MAB elements was greater than that of the parent unit), the negative result was set to zero to prevent the offsetting of positive remainders in the rollup summaries.

3. Results

a. Airlift. The results are presented in three summary tables and show that it would take over 2100 C-141 equivalents to lift the "delta" in the MAF minus two MABs case.

b. Representative Ship Mixes (In Lieu of Airlift). Obviously, the magnitude of the "deltas" that require 2100-plus C-141 equivalents to move is such that much of them would have to be moved by sealift. An initial sizing of the sealift to transport the MAF residual would require a mix of 42 LPDs

and LKAs. Given this number's near equivalency to the 56 ships in a notional MAF assault echelon, and in view of the demands that are already levied on the amphibious forces, it is considered more reasonable to size the residual in terms of either "black bottom" or "black bottom plus LPD and LKA" lift. The resulting order of magnitude representation of the sealift required is shown below. The lift to move the Landing Force Supplies for the MAF residual is an additional 6 (California class) or 9 (LKA) ships. Landing Force Supplies are the further days of supply needed to reach 60 days of supply in the force.

<u>CLASS</u>	<u>BLACK BOTTOMS</u>	<u>MIXED</u>
Independence (Personnel)	5	2
Comet (Ro/Ro)	9	1
California (Break Bulk)	-	1
Juneau (LPD)	-	14
Charleston (LKA)	<u>-</u>	<u>8</u>
Total	14 Ships	26 Ships

An explanation of table data columns is as follows:

- ELEMENT -- a noun description of the MAGTF element/unit/detachment being described.
- PERS -- the number of personnel remaining in the residual.
- KFT² -- the square feet (1000s) remaining in the residual.
- S-TON -- the short tons (2000# per short ton) remaining in the residual.
- C-141 -- the C-141 equivalents required to lift the line entry solely on the basis of cargo short tons (23 short tons per C-141 equivalent). There has not been any consideration given to outsize/oversize requirements or to personnel.

RECAP SUMMARY: Summarizes the residual for each of the four MAGTF elements as well as the total MAGTF in a single line entry.

<u>ELEMENT</u>	<u>PERS</u>	<u>KFT²</u>	<u>S-TON</u>	<u>C-141</u>
COMMAND ELEMENT	969	55	1,947	85
GROUND COMBAT ELEMENT	7,716	289	21,084	914
AVIATION COMBAT ELEMENT	7,211	261	14,956	651
COMBAT SERVICE SUPPORT ELEMENT	<u>5,840</u>	<u>167</u>	<u>10,570</u>	<u>457</u>
TOTAL	21,736	772	48,557	2,107

OVERALL SUMMARY: Expands the RECAP SUMMARY to battalion/group level of detail.

<u>ELEMENT</u>	<u>PERS</u>	<u>KFT²</u>	<u>S-TON</u>	<u>C-141</u>
<u>COMMAND ELEMENT</u>				
MAF HQ & H&S CO	168	5	233	10
OTHERS	<u>801</u>	<u>50</u>	<u>1,714</u>	<u>75</u>
TOTAL	969	55	1,947	85
<u>GROUND COMBAT ELEMENT</u>				
HQs BN, MARDI	1,220	40	1,505	65
INF RGT	2,849	23	1,406	61
ARTY RGT	1,694	85	8,928	387
TANK BN	560	46	3,760	163
RECON BN	278	6	264	11
CMBT ENGR BN	367	44	2,052	89
AAV BN	<u>748</u>	<u>45</u>	<u>3,169</u>	<u>138</u>
TOTAL	7,716	289	21,084	914
<u>AVIATION COMBAT ELEMENT</u>				
MAW HQ	407	1	293	13
MACG	628	20	953	42
MAG (VH)	2,498	91	3,166	138
MAG (VA)	3,185	134	10,377	451
MWSG	<u>493</u>	<u>15</u>	<u>167</u>	<u>7</u>
TOTAL	7,211	261	14,956	651
<u>COMBAT SERVICE SUPPORT ELEMENT</u>				
H&S BN, FSSG	1,637	36	2,044	88
MAINT BN	955	20	1,154	49
ENGR SUPPORT BN	674	55	2,766	120
MED BN	474	4	581	25
DENTAL BN	78	0	52	3
MOTOR TRANSPORT BN	305	39	1,616	70
LANDING SUPPORT BN	457	11	1,007	44
SUPPLY BN	<u>1,260</u>	<u>2</u>	<u>1,350</u>	<u>58</u>
TOTAL	5,840	167	10,570	457
<u>TOTAL MAF RESIDUAL:</u>	21,736	772	48,557	2,107

DETAILED SUMMARY: Expands the OVERALL SUMMARY to company/detachment level of details.

COMMAND ELEMENT

<u>ELEMENT</u>	<u>PERS</u>	<u>KFT²</u>	<u>S-TON</u>	<u>C-141</u>
<u>HEADQUARTERS</u>				
MAF HQ & H&S CO	168	5	233	10
CIT (2 TEAMS)	32	2	39	2
SSCT (2 TEAMS)	16	2	77	3
CAG	35	3	73	3
TOPO PLATOON	53	4	92	4
FORCE RECON CO(-)	<u>123</u>	<u>2</u>	<u>111</u>	<u>5</u>
TOTAL HQ:	427	18	625	27
<u>RADIO BATTALION</u>				
H&S CO(-), Radio Bn	221	8	360	16
CO A(-)	58	5	156	7
CO B(-)	<u>88</u>	<u>7</u>	<u>235</u>	<u>10</u>
TOTAL RADIO BN:	367	20	750	33
<u>COMMUNICATION BATTALION</u>				
HQ CO(-), Comm Bn	28	4	86	4
COMM CO(-)	0	6	168	7
COMM SPT CO(-)	67	4	110	5
LONG LINES CO(-)	<u>80</u>	<u>3</u>	<u>207</u>	<u>9</u>
TOTAL COMM BN:	175	17	571	25
<u>TOTAL MAF CMD ELM</u>				
<u>RESIDUAL:</u>	969	55	1,947	85

GROUND COMBAT ELEMENT

<u>ELEMENT</u>	<u>PERS</u>	<u>KFT²</u>	<u>S-TON</u>	<u>C-141</u>
<u>HQs BN, MAR DIV</u>				
HQ CO (-)	561	0	263	11
COMM CO(-)	331	14	433	19
SERV CO	150	16	484	21
MP CO (-)	45	1	32	1
TRUCK CO(-)	<u>133</u>	<u>9</u>	<u>293</u>	<u>13</u>
TOTAL HQ BN:	1,220	40	1,505	65
<u>INFANTRY REGIMENT</u>				
HQ CO, INF RGT (1 CO)	176	3	118	5
H&S CO, INF BN (3 CO)	804	15	547	24
INF CO (9 CO)	1,395	0	373	16
WPNS CO, INF BN (3 CO)	<u>474</u>	<u>5</u>	<u>368</u>	<u>16</u>
TOTAL INF RGT	2,849	23	1,406	61

<u>ELEMENT</u>	<u>PERS</u>	<u>KFT²</u>	<u>S-TON</u>	<u>C-141</u>
<u>ARTILLERY REGIMENT</u>				
HQ BTRY(-), ARTY RGT	253	21	919	40
HQ BTRY, D/S BN (1 BTRY)	212	5	239	10
*D/S BTRY (M198)	0	0	0	0
D/S BTRY (M114) (6 BTRY)	660	36	4,496	195
HQ BTRY, G/S BN (1 BTRY)	357	10	764	33
G/S BTRY (M109) (1 BTRY)	103	6	971	42
*HQ BTRY, 8" BN	0	0	0	0
8" BTRY (1 BTRY)	109	7	1,539	67
TOTAL ARTY RGT:	1,694	85	8,928	387
 <u>TANK BATTALION</u>				
H&S CO(-), TANK BN	248	25	1,238	54
TANK CO (2 CO)	214	15	2,352	102
TOW CO(-)	98	6	170	7
TOTAL TANK BN:	560	46	3,760	163
 <u>RECON BATTALION</u>				
H&S CO (-), RECON BN	120	6	217	9
RECON CO (2 CO)	158	0	47	2
TOTAL RECON BN:	278	6	264	11
 <u>COMBAT ENGINEER</u>				
H&S CO(-), CMBT ENGR BN	151	2	115	5
*CMBT ENGR CO	0	0	0	0
ENGR SPT CO(-)	216	42	1,937	84
TOTAL CMBT ENGR BN:	367	44	2,052	89
 <u>AAV BATTALION</u>				
H&S CO(-), AAV BN	298	12	763	33
AAV CO (2 CO)	450	33	2,406	105
TOTAL AAV BN:	748	45	3,169	138
 <u>TOTAL GCE RESIDUAL:</u>	 7,716	 289	 21,084	 914

* Unit included for completeness of force list. 0's indicate no residual.

AIR COMBAT ELEMENT

<u>ELEMENT</u>	<u>PERS</u>	<u>KFT²</u>	<u>S-TON</u>	<u>C-141</u>
<u>ACE HEADQUARTERS</u>				
HQ (-), MAW	265	1	199	9
MWHS (-), MWHS	142	0	94	4
*MWWU	0	0	0	0
TOTAL HQ, MAW:	407	1	293	13
<u>MACG</u>				
*H&MS (-), MACG	0	0	0	0
MWCS (-), MACG	113	4	266	12
*MACS/MTDS, MACG	0	0	0	0
*MATCS (-), MACG	0	0	0	0
MASS (-), MACG	173	8	325	14
FAAD (-), MACG	197	5	151	7
H&S BTRY (-), LAAM BN	145	3	211	9
*BTRY, LAAM BN	0	0	0	0
TOTAL MACG:	628	20	953	42
<u>MAG (VH)</u>				
H&MS (HML) (2 SQDN)	796	3	440	19
*H&MS (HMM)	0	0	0	0
*MABS (VH)	0	0	0	0
HMH (1 SQDN @ 16 CH-53A/D)	276	32	381	17
*HMH (CH-53E)	0	0	0	0
HMM (5 SQDN @ 12 CH-46)	965	39	1,138	49
HML (-) (12 UH-1N)	52	6	68	3
HMA (1 SQDN @ 24 AH-1J)	409	11	1,139	50
*VMO (-) (OV-10)	0	0	0	0
TOTAL MAG (VH):	2,498	91	3,166	138
<u>MAG (VA)</u>				
H&MS (VA) (1 SQDN)	419	19	1,214	53
MABS (VA) (1 SQDN)	298	3	320	14
VMA (3 SQDN @ 20 AV-8B)	1,086	81	3,962	172
VMA (AW) (2 SQDN @ 10 A-6E)	610	13	2,071	90
VMFA (2 SQDN @ 15 F-4J)	772	12	2,390	104
*VMFP (RF-4B)	0	0	0	0
*VMAQ (EA-6A)	0	0	0	0
VMGR (20 KC-130)	0	6	420	18
TOTAL MAG (VA)	3,185	134	10,377	451
<u>MWSG</u>				
**HQ SQDN (-), MWSG	71	0	0	0
**WES (-), MWSG	206	10	0	0
WTS (-), MWSG	216	5	167	7
TOTAL MWSG:	493	15	167	7
<u>TOTAL ACE RESIDUAL:</u>	7,211	261	14,956	651

* Unit included for completeness of force list. 0's indicate no residual.

** C-141 equivalents computed on cargo residual (S-TON column) only.

COMBAT SERVICE SUPPORT ELEMENT

<u>ELEMENT</u>	<u>PERS</u>	<u>KFT²</u>	<u>S-TON</u>	<u>C-141</u>
<u>H&S BATTALION, FSSG</u>				
H&S CO(-), H&S Bn	708	31	1,483	64
COMM CO(-)	195	3	149	6
SERV CO(-)	586	2	359	16
MP CO(-)	148	0	53	2
TOTAL H&S BN, FSSG	1,637	36	2,044	88
<u>MAINTENANCE BATTALION</u>				
H&S CO(-), MAINT BN	93	7	262	11
ELEC MAINT CO (-)	101	2	148	6
ENGR MAINT CO(-)	27	2	107	5
MT MAINT CO(-)	347	0	124	5
ORD MAINT CO(-)	103	5	347	15
GS MAINT CO (-)	284	4	166	7
TOTAL MAINT BN	955	20	1,154	49
<u>ENGINEER SUPPORT BATTALION</u>				
H&S CO(-), ENGR SPT BN	108	2	89	4
ENGR SPT CO(-)	386	32	2,073	90
**BRIDGE CO(-)	51	10	0	0
*BULK FUEL CO	0	0	0	0
ENGR CO (1 CO)	129	11	604	26
TOTAL ENGR SUPPORT BN	674	55	2,766	120
<u>MEDICAL BATTALION</u>				
H&S CO(-), MED BN	159	0	75	3
MED CO (1 CO)	100	2	165	7
HOSP CO (1 CO)	215	2	341	15
TOTAL MED BN	474	4	581	25
<u>DENTAL BATTALION</u>				
H&S CO, DENTAL BN	16	0	15	1
DENTAL CO (1 CO)	62	0	37	2
TOTAL DENTAL BN	78	0	52	3
<u>MOTOR TRANSPORT BATTALION</u>				
H&S CO(-), MT BN	122	4	201	9
TRANSP CO(-)	74	22	810	35
TRUCK CO(-)	109	13	605	26
%MTV CO	0	0	0	0
TOTAL MOTOR TRANSPORT BN	305	39	1,616	70

* Unit included for completeness of force list. 0's indicate no residual.

** C-141 equivalents computed on cargo residual (S-TON column) only.

% MTV CO excluded from comparison since no MTV COs currently exist.

COMBAT SERVICE SUPPORT ELEMENT

<u>ELEMENT</u>	<u>PERS</u>	<u>KFT²</u>	<u>S-TON</u>	<u>C-141</u>
<u>LANDING SUPPORT BATTALION</u>				
H&S CO(-), LS BN	239	8	684	30
LS CO (1 CO)	68	3	112	5
B&P CO(-)	<u>150</u>	<u>0</u>	<u>211</u>	<u>9</u>
TOTAL LANDING SUPPORT BN	457	11	1,007	44
<u>SUPPLY BATTALION</u>				
H&S CO(-), SUPPLY BN	341	1	124	5
**AMMO CO(-)	286	0	0	0
RATION CO(-)	173	1	115	5
MED LOG CO(-)	43	0	1,015	44
SUPPLY CO(-)	<u>417</u>	<u>0</u>	<u>96</u>	<u>4</u>
TOTAL SUPPLY BN	1,260	2	1,350	58
<u>TOTAL CSSE RESIDUAL:</u>	5,840	167	10,570	457

** C-141 equivalents computed on cargo residual (S-TON column) only.

PART II

DEADLY DELTAS (MAB MINUS TWO MAUs)

1. Background. These "deadly deltas" are the MAB residual remaining after the departure of two MAUs. Such a residual represents those elements from which one might draw augmentation for the composite MAB formed in the MAU-plus-MAU case. It quantifies what has been left behind in the typical MAB after the departure of two MAUs (remembering that the MAUs may have gone to two different locations, and a composite MAB may be formed using MAUs from different MABs, MAFs or even different FMFs). The remainder obtained by subtracting two MAUs from the MAB is a reasonable representation of a generic MAB residual, and the process is readily replicated in future examinations of this lift requirement.

2. Method. The data for this case were extracted by the Center for Naval Analyses using its Quick-Lift Model. The Quick-Lift Model is based on data provided from the MAGTF Lift Model maintained by HQMC (Code L).

3. Results. The results are presented in two summary tables and show that it would take almost 900 C-141 equivalents to lift the "delta" in the MAB-minus-two-MAUs case. The "delta" in this case is extremely large in relationship to the size of the composite MAB formed from two MAUs. There are, for example, over twice as many personnel remaining in the residual as deployed with the two MAUs.

DEADLY DELTAS (MAB MINUS TWO MAUs)

An explanation of table data columns is as follows:

- ELEMENT -- a noun description of the MAGTF element/unit/detachment being described.
- PERS -- the number of personnel remaining in the residual.
- KFT² -- the square feet (1000s) remaining in the residual.
- S-TON -- the short tons (2000# per short ton) remaining in the residual.
- C-141 -- the C-141 equivalents required to lift the line entry solely on the basis of cargo short tons (23 short tons per C-141 equivalent). There has not been any consideration given to outsize/oversize requirements or to personnel.

RECAP SUMMARY: Summarizes the residual for each of the four MAGTF elements as well as the total MAGTF in a single line entry.

<u>ELEMENT</u>	<u>PERS</u>	<u>KFT²</u>	<u>S-TON</u>	<u>C-141</u>
COMMAND ELEMENT	416	10	300	13
GROUND COMBAT ELEMENT	2,089	49	3,099	134
AVIATION COMBAT ELEMENT	7,088	197	12,197	530
COMBAT SERVICE SUPPORT ELEMENT	<u>1,409</u>	<u>87</u>	<u>5,039</u>	<u>219</u>
TOTAL	11,002	343	20,635	896

OVERALL SUMMARY: Expands the RECAP SUMMARY to battalion/squadron level of detail.

<u>ELEMENT</u>	<u>PERS</u>	<u>KFT²</u>	<u>S-TON</u>	<u>C-141</u>
<u>COMMAND ELEMENT</u>				
MAB HQ	54	1	41	2
RADIO BN	7	3	70	3
COMM BN	<u>355</u>	<u>6</u>	<u>189</u>	<u>8</u>
TOTAL	416	10	300	13

<u>GROUND COMBAT ELEMENT</u>				
DIV HQ	55	0	26	1
INF REGT	1,059	9	357	15
ARTY REGT	589	25	1,417	62
TANK BN	112	4	514	22
RECON BN	36	0	12	1
CMBT ENGR BN	82	1	76	3
AAV BN	<u>156</u>	<u>10</u>	<u>697</u>	<u>30</u>
TOTAL	2,089	49	3,099	134

<u>AVIATION COMBAT ELEMENT</u>				
MAW HQ	101	1	54	2
MACG	952	61	2,036	88
#MAG (VH)	1,811	3	1,260	55
#MAG (VA)	3,759	63	5,765	251
MWSG	<u>485</u>	<u>69</u>	<u>3,082</u>	<u>134</u>
TOTAL	7,088	197	12,197	530

#Figures based on 120 fixed-wing aircraft and an additional 69 helicopters.

<u>COMBAT SERVICE SUPPORT ELEMENT</u>				
H&S BN FSSG	74	2	71	3
MAINT BN	117	-	-	0
ENGR SUPPORT BN	446	36	2,588	113
MED BN	228	4	297	13
DENTAL BN	56	-	24	1
MOTOR TRANSPORT BN	199	28	972	42
LANDING SUPPORT BN	166	12	621	27
SUPPLY BN	<u>123</u>	<u>5</u>	<u>466</u>	<u>20</u>
TOTAL	1,409	87	5,039	219
<u>TOTAL MAB RESIDUAL*</u>	11,002	343	20,635	896

*The total MAB residual does not include the 354 C-141 equivalents needed for Landing Force Supplies. Landing Force Supplies are the additional days of supply needed to needed to bring the organizational load up to 15 days of supply.

Part III

MAF FLY-IN-ECHELON (FIE)

1. Background. The MAF Fly-in-Echelon (FIE) presented here is the first attempt by an FMF command to prioritize the "Deadly Deltas." It should be a benchmark for future efforts in this area. Clearly, all 2100-plus C-141 equivalents in the total MAF residual do not have the same priority. In different scenarios, different capabilities will have different priorities, but in virtually all scenarios, additional command and control capability will be a high priority requirement. Therefore, I MAF has defined the command and control requirements it feels are necessary to effectively fight a composite MAF. I MAF generated personnel, equipment and lift figures for the command, ground combat, aviation combat and combat service support elements of the MAGTF. Figures also include data on selected regiment and battalion headquarters. Since this is an initial effort, there are a number of areas where I MAF's data may need refinement. For example, some may see a need for more capability in the division FSCC or for ACE augmentation below the wing headquarters level. On the other hand, there may be, in these figures, some duplication of personnel and equipment between the division headquarters augmentation and the already present second (joining) MAB headquarters.

2. Method. The data for this part of the addendum were developed by Headquarters, I MAF, in coordination with the 1st MARDIV, 3rd MAW and 1st FSSG staffs. The figures were developed as a part of their efforts at I MAF CPX 1-85.

3. Results. The results are presented in four tables and a summary sheet. The tables contain a detailed list of personnel, equipment, and lift requirements in the proposed MAF FIE.

HEADQUARTERS ELEMENT

PERSONNEL

<u>T/O LINE#</u>	<u>BILLET</u>	<u>T/O RANK</u>	<u>MOS</u>
HEADQUARTERS I MAF			
1	<u>Command</u>	Commanding General	MajGen 9903
2		Aide-de-Camp	Capt 9910
6		Military Secretary	SSgt 0193
7		Driver	Cpl 3535
12	<u>Chief of Staff</u>	Chief of Staff	Col 9906
14		Staff Sec	LtCol 9910
16		Admin Chief	GySgt 0193
18		Admin Clk/Driver	Sgt 0151
20	<u>G-1</u>	AC/S G-1	Col 9906
23		Asst G-1	Maj 9912
24		Personnel Chief	MSgt
30		Admin Clerk	MGySgt 0151
31	<u>G-2</u>	AC/S G-2	Col 9906
32		Asst G-2 (Plans)	LtCol 0202/0205
34		Intel Chief	MGySgt 0291
35		MC&G Officer	WO 1402
36		Library/MC&G Chief	GySgt 0231
38		Admin Clerk	Sgt 0151
39		Admin Clerk	Cpl 0151
49	<u>Combat Intel</u>	Ground OB Analyst	SSgt 0231
51	<u>Unit</u>	Air OB Officer	Maj 0202
54		Air OB Analyst	SSgt 0231
56		Tgt Intel Officer	Maj 0202
59		Photo/Imagery Chief	MSgt 0241
60	<u>Special Intel</u>	SSO/SIGINT/Gnd EWO/	Maj 2602
	<u>Unit</u>		
62		SSO/SIO/Gnd EW Chf	MSgt 2691
64		SSO Clk/Radio Op/Dr	Cpl 2651
65	<u>Counter Intel</u>	Staff CI Officer	Maj 0210
67	<u>Unit</u>	Staff CI Chief	MSgt 0211
69		AC/S G-3	Col 9906
71		Ops Chief	MGySgt 8711
72		Admin Chief	SSgt 0193
73		Admin Clerk	LCpl 0151
75		Asst Liaison Off	Maj 0802
76		USN Liaison Officer	LCdr 1100
77	<u>Operations Unit</u>	Asst G-3 (Ops)	Col 9906
95		NBC Defense Officer	WO 5702
100	<u>Plans Unit</u>	Asst G-3 (Plans)	Col 9906
102		Plans Officer (Gnd)	LtCol 9911
103		Plans Officer (Air)	LtCol 9912
104		Air Officer	Maj 9912
107		Admin Chief	Sgt 0151
109		Admin Clerk	LCpl 0151
110		Constr Drafter	Cpl 1411
111		JOPS Officer	Maj 9910
112		JOPS/TPFDD/WMCCS	Sgt 4034
113		WEO	Maj 9911/5702
114		EWO	Maj 7588
115	<u>G-4 Executive</u>	AC/S G-4	Col 9906
119	<u>Unit</u>	Asst Opns Officer	Capt 0402
122		Admin Clerk/Driver	Cpl 0151
124		Plans Officer	LtCol 0402
125		Log Plans Chief	MGySgt 0491
126		Admin Clerk/Driver	LCpl 0151
127	<u>Aviation</u>	Avn Logistics Off	LtCol 9912
128	<u>Logistics</u>	Acft Maint Officer	LtCol 6002
129	<u>Unit</u>	Asst Acft Maint Off	Capt 6002

PERSONNEL

<u>T/O LINE#</u>	<u>BILLET</u>	<u>T/O RANK</u>	<u>MOS</u>
130	Acft Maint Chief	MSgt	6019
131	Avionics Officer	LtCol	6302
132	Avionics Chief	MSgt	6391
133	Avn Supply Officer	LtCol	3060
134	Asst Avn Supply Off	Capt	3060
135	Avn Supply Chief	MSgt	3072
136	Avn Ord Officer	LtCol	6502
137	Asst Avn Ord Off	Capt	6502
138	Avn Ord Chief	MSgt	6591
139	Admin Clerk	Sgt	0151
140	Admin Clerk/Driver	LCpl	0151
141	Weather Service Off	Maj	6802
142	Bulk Fuels Officer	CWO	1390
143	Airfield Svcs Off	CWO	7002
144	Aviation Safety Off	Maj	7596
145	Aviation Safety NCO	SSgt	8711
146	Aviation Ops Man	LCpl	7041
147	Supply Officer	LtCol	3002
151	Supply Chief	MSgt	3043
153	Supply Admin Clerk	Sgt	3043
156	Engineer Officer	LtCol	1302
158	USN (CEC)	LCdr	5100
159	Engr Ops Chief	MSgt	1349
161	Log Man (Driver)	Sgt	0431
163	Ordnance Officer	Maj	2102
168	Ammo Tech	SSgt	2311
170	Embarkation Officer	LtCol	0430
172	Asst EmbarkO (Air)	Capt	0430
174	Embarkation Chief	MSgt	0431
178	Motor Trans Officer	LtCol	3502
180	MT Maint Officer	CWO-4	3510
181	Operations Chief	MSgt	3537
184 <u>Maintenance</u>	MaintMgmt Officer	LtCol	0402
188 <u>Management</u>	MaintMgmt Chief	MSgt	0411
191	Log Data Clerk	Cpl	0411
192	Food Services Off	Maj	3302
193	Food Services Spec	MSgt	3381
195	CommElectronics Off	Col	9906
201	Data/Comm MaintSpec	MGySgt	2891
203	Radio Freq Mgr	MSgt	2591
206	Asst CEO (Plans)	LtCol	2502
208	Comm Chief (Plans)	MGySgt	2591
209	Admin Clerk	Sgt	0151
211 <u>Adjutant</u>	Adjutant	Maj	0180
213	Admin Chief	MSgt	0193
215	Admin Clerk/DCP	Sgt	0151
216	Admin Clerk/Driver	Cpl	0151
222	CMCC/CMS NCOIC	SSgt	0193
223	CMCC Clerk	Cpl	0151
226	CMCC Clerk	LCpl	1521
227	CMS Custodian	Lt	0180
228	CMCC/ADPE Custodian	Sgt	0151
229 <u>SJA</u>	SJA	Col	9914
232	Legal Services Clk	Sgt	4421
235 <u>Comptroller</u>	Budget Officer	Lt	3415
238 <u>Data Systems</u>	Force InfoSysMgmtO	LtCol	4002
239	Asst FISMO/Ln Off	Maj	4002
244 <u>Chaplain</u>	Chaplain	Capt	410X
246	Religious Prog Mgr	HMC	0000
248 <u>Medical</u>	Force Surgeon	Capt	2100
250	Med Admin Officer	LCdr	2300
253	Med Field Tech	HM1	8404
255 <u>Dental</u>	Force Dental Off	Capt	2200
258	Admin Asst	DT2	8703

EQUIPMENT DENSITY

<u>TAM#</u>	<u>NOMENCLATURE</u>	<u>QTY</u>	<u>CU</u>	<u>SQ</u>	<u>S/T</u>
	ADPE-FMF DPU	18	162		1.35
	ADPE-FMF PRINTERS	18	162		1.17
	ADPE-FMF PTP+MGTP	5	40		.17
C5320	Field Desks	30	100		1.01
K4959	Tables	35	105		.68
	5 Cube Boxes	80	400		16.
C5930	Safes, Field	6	24		.7
	Map Boards	8			.16
K4165	Typewriters	20			.2
	Folding Chairs	25	75		.125
D1160	M151	8	2,309.6	546.4	10.83
D0840	M416	8	1,264.8	357.6	2.96
D1016	M1008	2	1,574.2	248.9	5.9
D0880	M149	3	1,758.	273.9	3.66

COMMAND ELEMENT

PERSONNEL

121

CU

7,874.6

SQ

1426.8

S/T

36.215

H&S CO (NUCLEUS) MAF

PERSONNEL

<u>T/O LINE#</u>	<u>BILLET</u>	<u>T/O RANK</u>	<u>MOS</u>
2	Company Commander	Capt	9910
3	Executive Officer	Capt	0402
4	Gunnery Sergeant	GySgt	0431
7	Personnel Chief	Sgt	0121
8	Unit Diary Clerk	Cpl	0131
9	Personnel Clerk	Pvt	0121
10	Admin Clerk	Cpl	0151
12	Operations/Logs/ Embarkation Officer	Lt	0302
14	Embarkation NCO	Sgt	0431
15	Admin Clerk	LCpl	0151
17	MT Section Chief	GySgt	3529
19	Motor Vehicle Operator	Sgt	3531
20	Motor Vehicle Operator	Cpl	3531
21	Motor Vehicle Operator	LCpl	3531
22	Auto Mechanic	LCpl	3521
23	Admin Clerk	Pvt	0151
24	Motor Vehicle Operator	Pfc	3531
41	Electronic Shop Foreman	SSgt	1141
43	Electrician	Sgt	1141
45	Electrician	Cpl	1141
50	Carpenter	Cpl	1371
53	Supply Chief	GySgt	3043
54	Supply Admin Clerk	Sgt	3043
55	Supply Admin Man	Cpl	3043
56	Warehouse Chief	Cpl	3051
57	Supply Admin Man	LCpl	3043
58	Accounting Clerk	LCpl	3451
59	Warehouse Clerk	Pfc	3051
62	Medical Field Technician	HMI	8404

EQUIPMENT DENSITY

<u>TAM#</u>	<u>NOMENCLATURE</u>	<u>QTY</u>	<u>CU</u>	<u>SQ</u>	<u>S/T</u>
C5320	Fld Desk	1	8		.081
C6655	Typewriter	1	.63		.002
K4959	Tables	1	3		.0195
	5cube Boxes	2	10		.1
	32cube Boxes	15	480		2.625

H&S CO (NUCLEUS) MAF

PERSONNEL	CU	SQ	S/T
29	564		2.827

1 MAF HQ

PERSONNEL	CU	SQ	S/T
150	8,438.6	1426.8	39.042

PERSONNEL

<u>T/O LINE#</u>	<u>BILLET</u>	<u>T/O RANK</u>	<u>MOS</u>
3	Division Cmdr	MajGen	9903
4	Aide	Capt	9911
15	Chief of Staff	Col	9906
18	Admin Clerk	Sgt	0151
19	Admin Clerk	Sgt	0151
23	Asst G-1	LtCol	0180
193	Asst Pers Off	Lt	0180
170A	Admin Clk	Sgt	0151
172A	Admin Clk	Cpl	0151
108	Courier	Cpl	Any
114	Courier	Cpl	Any
175	OIC Reg PUBS	Lt	9910
123A	Driver	Pvt	Any
125	Driver	Pvt	Any
32	AC/S G-2	Col	9906
40	Intel/Opns Off	LtCol	0205
41	Intel/Opns Chf	MSgt	0231
42A	Chief Analyst	Capt	0205
43	Intel Analyst	SSgt	0231
43B	Intel Analyst	Sgt	0231
44A	Collections Off	Maj	0202
45	Collections Chf	GySgt	0231
48	Target Intel O	Lt	0205
51	Imagery Interpretation Chf	MSgt	0241
54	CI Off	Capt	0210
59	Inter Trans Off	Capt	0202
128	Plt Cmdr(SCAMP)	Capt	0302
130	Plt Sgt (SCAMP)	MSgt	0369
91	AC/S G-3	Col	9906
93	Admin Clerk	Sgt	0151
95	Ops Officer	LtCol	0302
96	Asst Ops Off	Maj	9911
96A	Asst Ops Off	Maj	0107
96B	Asst Ops EW (Watch O)	Capt	2602
97	Ops Chf	MGySgt	0369
98	Ops Asst	GySgt	0369
99	G-3 Ops Chf	GySgt	0369
100	Ops Asst/Driver	LCpl	0311
101	Admin Clerk	LCpl	0151
103	Wpns Empl Off	LtCol	0802
105	Div NBCD Off	WO	5702
105B	Watch Tm NCOIC	GySgt	5711
117	Plans Off	LtCol	0302
403	Asst Historical (Off Watch O)	Capt	9910
122	A C/S G-4	Col	9906
126	G-4 Plans Off	LtCol	0402
131	G-4 Asst Ops	Maj	0402
132	G-4 Asst Ops/LNO to FSSG	Capt	0402
133	Log Chief	MGySgt	0491
138	G-4 Asst Ops/LNO to FSSG	Maj	0402
141	Maint Mgmt Analyst	GySgt	0411
256	Fire Spt Sec		
259	Asst FSC	LtCol	0802
260	Asst FSC	Maj	0802
348A	Ammo Tech	Cpl	2311
386	Asst MTO	Capt	3502/3510
394	Engineer Off	LtCol	1302
396	Engr Opns Chf	MGySgt	1371

PERSONNEL

<u>T/O LINE#</u>	<u>BILLET</u>	<u>T/O RANK</u>	<u>MOS</u>
262	Div Target Info Officer	Capt	0802
263	OBS LN Chf	MGySgt	0861
264	OBS LN Man	GySgt	0861
115	Fld Radio Opr	Cpl	2531
116	Fld Radio Opr	LCpl	2531
205	Div Air Off	Col	9907
206	Asst Div AirOff	Maj	9912
207	Air Controller	Capt	7207
223	CEO	Col	9906
225	Asst CEO	Maj	2505
227	Maint Spec	WO	2805
229	Asst Comm Chf	MSgt	2591
230	Maint Chf	GySgt	2861
261	Arty RGT NGFOff	LCDR	1100
300	SJA	Col	9914
318	Surgeon	Capt	2100
338	NGF Section	Capt	
340	Asst NGP Off	LCDR	1100

EQUIPMENT DENSITY

<u>TAM#</u>	<u>NOMENCLATURE</u>	<u>QTY</u>	<u>CU</u>	<u>SQ</u>	<u>S/T</u>
A1930	Radio Set AN/MRC 110	5	1640	300	6.67
A1935	Radio Set AN/MCR 138	1	350	59	1.29
B0953	Generator 60HZ, 30 KW	1	83	20	1.32
	Mount Out Box 5cu	6	60		.3
	Mount Out Box 6cu	3	18		.15
C4260	Camo Screen Spt Sys	34	105.4		1.19
C4261	CSS LTWT Radar Scatter	44	220		1.54
C5200	Lantern Set	6	18		.135
C5400	Office Supply Set	2	24.2		.14
	Fld, Typewriter 11"				
CL0012	Carlson Tent	2	38		.45
C6350	Laundry Table	3	48		0.25
C6410	GP Tent	5	95		1.13
C6390	CP Tent	10	171		1.22
D0840	TRL M416	15	3360	690	4.27
D0860	TRL M105	4	1696	384	5.34
D0880	TRL Water M149	1	594	101	1.26
D1035	Truck M813	7	10,497.2	4389	146.8
D1059	Truck M923	1	1591	208	11.4
D1160	Truck M151	11	3850	638	13.2
D1190	Truck M109 Van	1	1960	181	7.8
K4165	Chairs, Folding	30	90		.3
K4959	Table, Field	6	18		.117

PERSONNEL

<u>T/O LINE#</u>	<u>BILLET</u>	<u>T/O RANK</u>	<u>MOS</u>
HEADQUARTERS COMPANY			
HEADQUARTERS BATTALION			
2	Headquarters		
	Section (Hq Co)		
3	Bn Cmdr/Hq Cmdt	Col	9910
4	Bn Exec Off	Maj	0302
17	MSGR/Driver	Pvt	5574
21	Ops Chief	GySgt	0369
27	Log Off	Capt	0402
29	Log Chf	MSgt	0491
30	Embark Man	SSgt	0431
36	Med Fld Svc Tch	HM1	8404
37	Med Fld Svc Tech	HM2	8404
39A	Med Fld Svc Tech	HM3	8404
39B	Med Fld Svc Tech	HM3	8404
53	Co GySgt	GySgt	0369
56A	Working Pty for	PVT	0311 CP (Non -T/O)
56B	Working Pty for	PVT	0311
56C	Working Pty for	PVT	0311
56D	Working Pty for	PVT	0311
56E	Working Pty for	PVT	0311
56F	Working Pty for	PVT	0311
56G	Working Pty for	PVT	0311
56H	Working Pty for	PVT	0311
56I	Working Pty for	PVT	0311
56J	Working Pty for	PVT	0311
Non T/O	Courier	LCpl	Any
Non T/O	Courier	LCpl	Any
Non T/O	Courier	LCpl	Any
Non T/O	Courier	LCpl	Any
Non T/O	Driver	Pvt	Any
Non T/O	Driver	Pvt	Any
Non T/O	Driver	Pvt	Any
Non T/O	Driver	Pvt	Any

DIV HQ

PERSONNEL

173

CU

26,526.8

SQ

6,970

S/T

206.272

PERSONNEL

<u>T/O LINE#</u>	<u>BILLET</u>	<u>T/O RANK</u>	<u>MOS</u>
SERVICE COMPANY			
39	MT Off	Lt	3502
40	MT Chf	MSgt	3529
44A	MV Driver	Cpl	3531
44B	MV Driver	Cpl	3531
44C	MV Driver	Cpl	3531
44D	MV Driver	Cpl	3531
45A	MV Driver	LCpl	3531
45B	MV Driver	LCpl	3531
45C	MV Driver	LCpl	3531
45D	MV Driver	LCpl	3531
45E	MV Driver	LCpl	3531
48	Auto Rpr Chf	SSgt	3529
49	Auto Mechanic	Sgt	3521
50	Auto Mechanic	Cpl	3521
89	Supply Admin	SSgt	3043
94	Supply Admin	Cpl	3043
	Electrician	Cpl	1141

PERSONNEL

<u>T/O LINE#</u>	<u>BILLET</u>	<u>T/O RANK</u>	<u>MOS</u>
COMM CO			
1	Co Hq		
2	HqSect		
4	XO	Capt	2502
25	Comm O	Lt	2502
26A-B	Comm Watch O	Lt	2502
34A-B	Comm Cntr Supv	SSgt/Sgt	2549
35C-D	Comm Cntr Man	Cpl	2542
36A-D	Teletype Opr	Cpl	2542
37C-H	Comm Cntr Man	PFC/LCpl	2542
44	Wire O	Capt/Lt	2502
46	Wire Supv	SSgt	2519
49A-B	Wire Supv	Sgt	2519
50A-D	Wireman/SB Op	Cpl	2512
51A-E	Wireman/SB Op	PFC/LCpl	2512
54	Wireman Inst	Sgt	2513
56A-B	Wireman Inst	PFC/LCpl	2513
92A	Asst Radio O	WO	2502
95	HF Radio Supv	SSgt	2537/34
96	Radio Sup	SSgt/Sgt	2537/31
96A	HF Radio Sup	SSgt/Sgt	2537/34
97A-B	HF Fld Rad Op	Cpl	2534
98O-Y	Fld Rad Op	LCpl/PFC	2531
98Z-AD	HF Fld Rad Op	LCpl/PFC	2534
104	Asst Maint O	Lt	2802
105A	A/Maint Chf	SSgt	2861
106	Rad Tech Supv	SSgt	2861
111A-B	Rad Tech	Sgt	2841
112	Rad Tech	Cpl/PFC	2841/61
113A-B	Rad Rprm	LCpl/PFC	2841
115	Tele Tech	Sgt	2811
117	Tele Rprm	Cpl	2813
117A	Tele Rprm	LCpl	2813
124	Mob CCTR Tech	Sgt	2829
127	Mob Data Term Tech	Sgt/Cpl	2827

EQUIPMENT DENSITY

<u>TAM#</u>	<u>NOMENCLATURE</u>	<u>QTY</u>	<u>CU</u>	<u>SQ</u>	<u>S/T</u>
A1935	MRC 138	6	2100	354	7.74
A2050	PRC-77	12	12	24	.12
A8003	HYL-3 08082A	6	1.86	5.16	.048
A8005	KY-38 06723A	4	1.08	.24	.032
A8006	KYK-38 08986A	2	2	.6	.002
A1730	GRA-39	2	2	2	.022
A2065	PRC-104	2			.053
B0953	MEP 005	2	172	44	3.5
H2045	RC-292 00266A	12	30.48		.252
H2044	AS-2259 07508A	1	1		.008
H2165	RL-159 Cable	12	18.84		.42
H2084	CX-4566 (250ft role)	10	90		.475

COMM CO
PERSONNEL
73

CU
2341.26

SQ
430

S/T
12.672

PERSONNEL

<u>T/O LINE#</u>	<u>BILLET</u>	<u>T/O RANK</u>	<u>MOS</u>
SPECIAL SECURITY TEAM/SSCT T/O 4732M			
2	Team Cmdr	Lt	2602
3	Team Chf	GySgt	2659
4	Comm Supv	Sgt	2659
5A	Comm Opr	Cpl	2651
5B	Comm Opr	Cpl	2651
6A	Comm Opr	LCpl	2651
6B	Comm Opr	LCpl	2651

EQUIPMENT DENSITY

<u>TAN#</u>	<u>NOMENCLATURE</u>	<u>QTY</u>	<u>CU</u>	<u>SQ</u>	<u>S/T</u>
A0266	AN/MS-63	1	616	99	2.9

SSCT				
PERSONNEL	CU	SQ	S/T	
7	3047.26	529	15.572	

GROUND COMBAT ELEMENT				
PERSONNEL	CU	SQ	S/T	
318	38,501.06	9502	262.874	

PERSONNEL

<u>T/O LINE#</u>	<u>BILLET</u>	<u>T/O RANK</u>	<u>MOS</u>
11TH MARINES			
3	Command Off	Col	9906
38	Asst S-3/NSO	Maj	0802
40	Asst S-3/Asst	Capt	0802
44	Ops Asst	GySgt	0848
45	Ops Asst	SSgt	0848
46	Ops Asst/Drv	SSgt	0848
47	Fire Cntl Man	LCpl	0844
114	Radio Opr	Sgt	2531
115	Radio Opr/Drv	Cpl	2531
116	Radio Opr	LCpl	2531
117	Radio Opr	PVT	2531

EQUIPMENT DENSITY

<u>TAM#</u>	<u>NOMENCLATURE</u>	<u>QTY</u>	<u>CU</u>	<u>SQ</u>	<u>S/T</u>
A1930	Radio Set AN/MRC 110	6	360	1968	8.01
C6410	Tent, GP Med	1	19		0.22
D1059	Trk, M923/925	1	1690	222	11.8
D1160	Trk, M151	1	350	58	1.2

11TH MARINES

PERSONNEL	CU	SQ	S/T
11	2,419	640	21.23

PERSONNEL

<u>T/O LINE#</u>	<u>BILLET</u>	<u>T/O RANK</u>	<u>MOS</u>
1ST TANK BN			
3	Commanding Off	LtCol	1802
12	Pers/Admin Chf	GySgt	0193
12C	Clerk/Driver	Cpl	0121
12E	Clerk/Driver	LCpl	0121
		Lt	0202
23	Intel Asst/Drv	Sgt	0231
		Maj	1802
28	Fire Spt Coord	Capt	0802
28A	Air LN Off	Capt	7207
30	Operations Asst	MGySgt	1811
		Maj	1802
47	Comm Chief	MSgt	2591
49	Radio Tech	SSgt	2861
50	Radio Chief	SSgt	2537
51	Wire Chief	Sgt	2512
53	Radio Repairman	Sgt	2841
60	Wireman	LCpl	2512
63A-D	Fld Radio Oper/Driver	LCpl	2531
114	Auto Mechanic/Driver	Cpl	3521

EQUIPMENT DENSITY

<u>TAM#</u>	<u>NOMENCLATURE</u>	<u>QTY</u>	<u>CU</u>	<u>SQ</u>	<u>S/T</u>
A1930	Radio Set AN/MRC 109	1	368	61	1.2
A1930	Radio Set AN/MRC 110	2	328	60	1.3
A1935	Radio Set AN/MRC 138	1	350	59	1.2
D1160	Trk M151A2 W/GRC 160	4	1040	236	4.9
D0840	Trl M416A2 Ut1 1/4 Tn	3	672	138	0.8

1ST TANK BN

PERSONNEL

19

<u>CU</u>	<u>SQ</u>	<u>S/T</u>
2,758	614	9.4

PERSONNEL

T/O LINE#BILLETT/O
RANKMOS

1ST CBT ENGR BN

3	Bn CO	LtCol	1302
25	S-2	Capt	1302
27	Intel Spec	Cpl	0231
29	S-3	Maj	1302
42	S-4	Maj	0402
74	Comm Off	Lt	2502
85A-E	Fld Radio Opr	LCpl	2531
86A-E	Fld Radio Opr	PVT	2531
63	Motor Veh Opr	LCpl	3531
64	Motor Veh Opr	PVT	3531
114	Electrician	PVT	1141

EQUIPMENT DENSITY

<u>TAM#</u>	<u>NOMENCLATURE</u>	<u>QTY</u>	<u>CU</u>	<u>SQ</u>	<u>S/T</u>
A1935	Radio Set MRC 138	1	350	59	1.29
A1930	Radio Set MRC 110	1	328	60	1.33
D1160	Truck M151	1	350	58	1.2
D0840	Trl M4161	1	224	46	0.28

1ST CMT ENGR BN

PERSONNEL

19

<u>CU</u>	<u>SQ</u>	<u>S/T</u>
1252	223	4.1

PERSONNEL

<u>T/O LINE#</u>	<u>BILLET</u>	<u>T/O RANK</u>	<u>MOS</u>
1ST RECON BN			
3	Bn CO	LtCol	0302
15	S-3	Maj	0302
17	S-2	Lt	0202
22	Intel Asst	Sgt	0231
23	Reconman/Drv	LCpl	0321
26	S-4 Chief	GySgt	0491
34	Sply Admin Man	Sgt	3043
45	MV Tech	Sgt	3521
50	MV Opr	PVT	3531
64	Med Fld Srv	HM2	8404
74	Comm Off	Lt	2502
78	Radio Chief	GySgt	2537
81	Radio Telgh Op	Cpl	2531
82	Fld Radio Opr	LCpl	2531
68	Radio Repairman	Sgt	2841
98	Wireman	LCpl	2542

EQUIPMENT DENSITY

<u>TAM#</u>	<u>NOMENCLATURE</u>	<u>QTY</u>	<u>CU</u>	<u>SQ</u>	<u>S/T</u>
A1930	Radio Set AN/MRC 110	2	328	60	1.3
A1935	Radio Set AN/MRC 138	2	700	60	2.4
D0875	Trl M416	5\	1,120	230	1.4
D1160	Truck M151	1	350	58	1.2

1ST RECON BN

PERSONNEL	CU	SQ	S/T
16	2498	526	6.3

AVIATION COMBAT ELEMENT

PERSONNEL

<u>T/O LINE#</u>	<u>BILLET</u>	<u>RANK</u>	<u>MOS</u>
DET HQ MAW FIE			
4	Commanding General	MajGen	9903
5	Aide-de-Camp	Capt	9912
7	Sergeant Major	SgtMaj	9999
15	Chief of Staff	Col	9907
16	Staff Secretary	Maj	9910
17	Admin Clerk	SSgt	0151
18	Admin Clerk	Cpl	0151
12A	Cook Specialist	SSgt	3372
9	Driver	Cpl	9907
30	AC/S G-1	Col	9907
32	Personnel Officer	Maj	9910
	Asst Pers Officer	Capt	0180
34	Pers/Admin Chief	MSgt	0193
35	Admin Clerk	Sgt	0151
36	Admin Clerk	Sgt	0151
37	Admin Clerk	Sgt	0151
150	CMS Officer	Capt	9910
153	CMS Clerk	Sgt	0151
55	AsstAirIntelOff	Maj	0202
	PMO	Capt	
56	Target Officer	Lt	0205
	Collection Officer	Capt	0202
57	OOB Officer	Lt	0202
68	ACI Chief	MSgt	0231
	Collections Chief	GySgt	0231
60	Target Analyst	SSgt	0231
61	OOB Analyst	Sgt	0231
	G-2 TACC Watch Clk	Cpl	0231
	Workbook Clerk	Cpl	0231
	Workbook Clerk	Cpl	0231
	Journal Clerk	Cpl	0231
	Journal Clerk	Cpl	0231
72	FIIU Rep	SSgt	0241
77	SigInt Officer	Capt	2602
78	SigInt Spt Chief	MSgt	2691
79	SSO Chief	SSgt	2651
82	SI Analyst	Cpl	0231
	SSCT Team Chief	GySgt	2651
	Spec Comm Supvr	Sgt	2651
	Spec Comm Supvr	Sgt	2651
81	Spec Comm Opr	Cpl	2651
	Spec Comm Opr	Cpl	2651
	Spec Comm Opr	LCpl	2651
	Spec Comm Opr	LCpl	2651
	SCIO	Capt	0210
68	CIA	Sgt	0211
	CIA	GySgt	0211
	CIA	Sgt	0211
100	Asst G-3	LtCol	9912
103	Asst Ops Officer	Maj	9912
127	Plans Officer	LtCol	9912
	Plans Officer	LtCol	9912
102	WACO	Maj	72XX
129	Plans Chief	GySgt	7041
107	Ops Chief	Sgt	7041
108	Ops Chief	Sgt	7041
109	Ops Clerk	Cpl	7041
110	Ops Clerk	LCpl	7041
111	Ops Clerk	LCpl	7041
111A	Ops Clerk	LCpl	7041
	Ops Runner	LCpl	XXXX
	Ops Runner	LCpl	XXXX
130	Ops Clerk (Plans)	Cpl	7041
101	Senior Watch Off	LtCol	9912
	Senior Watch Off	LtCol	9912
	WEO Watch Officer	Capt	9912
	WEO Watch Officer	Capt	9912
	EWO Watch Officer	Capt	9912

PERSONNEL

<u>T/O LINE#</u>	<u>BILLET</u>	<u>T/O RANK</u>	<u>MOS</u>
	EWO Watch Officer	Capt	9912
	FW Frag Officer	Capt	9912
	RW Frag Officer	Capt	9912
	NBC Officer	WO	5702
117	NBC Chief	GySgt	5711
120	NBC TM Member	Sgt	5711
	NBC TM Member	Sgt	5711
	NBC TM Member	Sgt	5711
	NBC TM Member	Sgt	5711
132	AC/S G-4	Col	9907
134	Log Officer	Capt	0402
	Pol Officer	Lt	1390
218C	Engr Chief	SSgt	1349
207	Asst Embark Officer	Lt	0430
212	Embark Clerk	Cpl	0431
	Ground Sup Officer	Capt	3002
	Ground Sup Chief	SSgt	2111
263B	MT Officer	Capt	3502
	EAF Chief	SSgt	7011
	Bulk Fuel NCO	Sgt	1391
263C	MT Chief	SSgt	3537
	Armory Chief	GySgt	2111
	Armorer	LCpl	2111
	Systems Chief	GySgt	4069
137	Log Clerk	LCpl	0431
241	Wing Medical Off	LCdr	2305
244	Med Flo Tech	HM3	8432
24	ISMO	Lt	4002
217	FD Tech	MSgt	4066
	Sys Clerk	Cpl	4066
	Sys Clerk	LCpl	4066
190	CEO	Col	9906
193	Maint Off	Maj	5902
200	Comm Man	Cpl	2542
195	Maint Spec	MGySgt	2594
199	Admin Clerk	PFC	0151
265	ALM	Col	9908
	Asst Maint Officer	Maj	6604
267	Supply Officer	LtCol	3070
160	Helo Officer	Capt	6002
168	Avionics Officer	Maj	6302
248	Ord Officer	LtCol	6502
162	IMRL Chief	GySgt	60XX
	Maint Admin Chief	GySgt	6046
	Maint Admin Chief	Sgt	6046
165A	Maint Admin Chief	Sgt	6046
166	Admin Clerk	Sgt	3072
184	Chaplin	Capt (USN)	4100

EQUIPMENT DENSITY

<u>TAM#</u>	<u>NOMENCLATURE</u>	<u>QTY</u>	<u>CU</u>	<u>SQ</u>	<u>S/T</u>
A0080	Auto Data Proc Equip	(9)	153		1.17
A0266	CommCentral AN/MSC-63	(1)		99	2.9
B0020	AnalPhotogramPositgSys	(1)	31		.23
C4477	Copy Mach Table-Top Foto	(1)	7		.12
C6490	Tool Kit Mechanics	(1)	1		.03
D0105	Dolly Set, Lift, Trans- portable M832	(1)		122	1.85
D0840	Trailer,AmphibCargo M416	(1)	224	46	.29
D1061	Trk,Cargo M928 5Tn w/winch	(1)	2082	318	13.04
D1160	Trk,Utility M151A2	(1)	260	59	1.23
B0953	PU-708/MEP-5	(1)	0	22	1.75
C4250	Calculator	(1)	4	0	.03
C4436	Container, Water, Plastic	(7)	1	0	.00
C5930	Security Filing Cabinet	(10)	40	0	.55
H2443	Tel Set TA 312	(2)	2	0	.01
H2485	TE-33, Tool Kit	(3)	0	0	.00
K4344	GP First Aid Kit	(1)	0	0	.00
Z0001	Pub, 9cu Box	(16)	144	0	1.20
Z0002	Office Sup, 7cu Box	31	217	0	2.33
Z0003	Files/Sup, 5cu Box	(57)	285	0	3.56
Z0005	Map Board	(6)	36	0	.15
Z0006	IBM Writer	(1)	1	0	.01
Z0007	IBM Printer	(1)	2	0	.02
Z0008	Paper Shredder	(1)	2	0	.03
Z0009	Stand for Shredder	(1)	6	0	.01

DET HQ MAW FIE
PERSONNEL
116

CU
3498

SQ
666

S/T
30.51

PERSONNEL

<u>T/O LINE#</u>	<u>BILLET</u>	<u>T/O RANK</u>	<u>MOS</u>
DET HQ MAW			
31	Asst G-1	LtCol	9912
149	Adjutant	Maj	0180
	CMCC NCO	GySgt	0151
156F	Admin Clerk	Sgt	0151
43H	Admin Clerk	LCpl	0151
45	AC/S G-2	Col	9910
54	Air Cmbt Intel Off	Maj	0202
	G-2 TACC Watch Off	Capt	0202
49	G-2 Chief	MGySgt	0291
80	SI Support Asst	SSgt	2651
62	OOB Analyst	Sgt	
66	CI Officer	Lt	0210
99	AC/S G-3	Col	9907
101	Ops Officer	LtCol	9912
104	FW Frag Officer	Capt	9912
104A	RW Frag Officer	Capt	9912
115	WEO	Maj	5715
113	EWO	Maj	7588
105	G-3 Chief	MSgt	7041
109	Ops Clerk	Cpl	7041
110	Ops Clerk	Cpl	7041
133	G-4 Ops Officer	LtCol	9912
135	Log Chief	MSgt	0491
218B	Engr Officer	Capt	1302
	EAF Officer	Lt	
137	Log Clerk	Cpl	0431
192	Telecom Sys Officer	Capt	2505
198	Op Comm Chief	MSgt	2591
200	Comm Man	Cpl	2542
159	ALM FW Officer	Capt	6002
273	Avn Supply Chief	MSgt	3072
282	Admin Clerk	Sgt	3043

EQUIPMENT DENSITY

<u>TAM#</u>	<u>NOMENCLATURE</u>	<u>QTY</u>	<u>CU</u>	<u>SQ</u>	<u>S/T</u>
C4208	Navy Knock-Down Deck	25	75	0	.26
C4436	Plastic Water Cans	20	2	0	.00
C5320	Off Supply Set, Fld Desk	40	320	0	3.24
C5400	Off Supply Set, Fld Typwtr	9	109	0	.63
C5930	Security Filing Cabinet	2	8	0	.11
C6655	Manual Typewriter	6	4	0	.01
K4165	Chair, Folding	70	210	0	.70
K4170	Std Chair, Folding w/arms	8	14	0	.04
K4959	Table, Folding Top, wood	18	54	0	.35
Z0002	Office Sup, 7 Cu Box	2	14	0	.15
Z0003	Files/Sup, 5 Cu Box	2	10	0	.13

DET HQ MAW

PERSONNEL

32

CU
820

SQ
0

S/T
5.62

PERSONNEL

<u>T/O LINE#</u>	<u>BILLET</u>	<u>T/O RANK</u>	<u>MOS</u>
DET MWHS FIE			
2	Commanding Officer	LtCol	9912
4	Sqd SgtMaj	SgtMaj	9999
14	Admin Clerk	Cpl	0151
	Public Affairs Off	1st Lt	4302
109	Guard	Cpl	5811
110	Guard	LCpl	5811
110A	Guard	LCpl	5811
111	Guard	Pvt	5811
111A	Guard	Pvt	5811
111B	Guard	Pvt	5811
	Radio Operator	Sgt	2531
	Radio Operator	Cpl	2531
	Radio Operator	LCpl	2531

EQUIPMENT DENSITY

<u>TAM#</u>	<u>NOMENCLATURE</u>	<u>QTY</u>	<u>CU</u>	<u>SQ</u>	<u>S/T</u>
C4870	Fly Tent Storage	1	2	0	.01
C5200	Lantern Set,	1	3	0	.02
	Gasoline				
D0840	Tr1, Amphib Cargo	1	244	46	.29
	M416				
D1016	Trk, M1008 (CUCV)	1	756	120	2.85
D1160	Trk, Utility M151A2	1	0	59	1.23

DET HWIS FIE

<u>PERSONNEL</u>	<u>CU</u>	<u>SQ</u>	<u>S/T</u>
13	1002	225	4.4

PERSONNEL

<u>T/O LINE#</u>	<u>BILLET</u>	<u>T/O RANK</u>	<u>MOS</u>
DET MWHS MAW			
291	Camp Commandant	Capt	
293	Camp GySgt	GySgt	
301	Embark NCO	SSgt	
314	Motor Trans NCO	SSgt	
296	Supply NCO	Sgt	
310	Corpsman	HM3	
305	Armorer	Sgt	
371	Admin Clerk	Cpl	
319	Driver	Cpl	
320	Driver	Cpl	
391	Elect/Gen Opr	LCpl	
321	Driver	LCpl	
392	Elect/Gen Opr	LCpl	
376	House Keeper	LCpl	
377	House Keeper	PFC	
378	House Keeper	PFC	
379	House Keeper	PFC	

EQUIPMENT DENSITY

<u>TAM#</u>	<u>NOMENCLATURE</u>	<u>QTY</u>	<u>CU</u>	<u>SQ</u>	<u>S/T</u>
B1021	Gen Set, Skid MTD MEP OOGA	(3)	109	25	6.75
B1280	Light Set, Illum Lg	(10)	3500		25.25
B2465	Tractor, Rubber Terex	(1)	1297	167.40	12.15
B2560	Truck, Forklift RT6000	(1)	1350	135	9.25
C4260	Camo Screen Support/Sys	(15)	3.10	NL	.53
C4261	CSS-LWeight, Radar				
	Scatter Woodland	(15)	5	NL	.53
C4436	Container, Water, Plastic	(80)		NL	
C4870	Fly Tent Storage	(5)	2	NL	.06
C5200	Lantern Set, Gasoline	(10)	3	NL	.22
C5320	Office Supply Set,				
	Field Desk	(45)	8	NL	3.65
C5400	Office Supply Set,				
	Fld Typewriter, 11 in	(11)	12.10	NL	.77
C6350	Table Laundry 96in x 36in	(2)	16	NL	.168
C6388	Tarpaulin 26'x 22'	(6)	5	NL	.31
C6655	Typewriter Non-Portable,				
	Manual 13in	(6)	.63	NL	.01
C8638	AMAL 635-Aid Station Equip	(1)	58	NL	.46
C8640	AMAL 636-Aid Station				
	Consumables	(1)	68	NL	.54
D0880	Tlr, Tank Water 400 Gal				
	M49A1	(2)	594		10.1
D1059	Trk, Cargo ST 6x6 M923	(4)	1591	208	45.76
D1160	Trk, Util 1/2 4x4 M151A2	(4)	260	59	4.9
K4128	Can, Gasoline, Military				
	Screwcap	(25)	1	NL	.12
K4165	Chair, Folding	(50)	60		1.25
K4170	Std Chair, Folding w/arms	(8)	1.70	NL	.04
K4959	Table, Folding, Top, wood	(20)	3	NL	.39
K4982	Tarpaulin, 23'x15'	(4)	5	NL	.20
C5930	Security Filing Cabinet	(2)	4	NL	.11

DET MWHS MAW

PERSONNEL	CU	SQ	S/T
17	8,362.53	594.4	113.4
PERSONNEL			

PERSONNEL

<u>T/O LINE#</u>	<u>BILLET</u>	<u>T/O RANK</u>	<u>MOS</u>
110	Guard	LCpl	5811
110A	Guard	LCpl	5811
111	Guard	Pvt	5811
111A	Guard	Pvt	5811
111B	Guard	Pvt	5811
446	NBC NCO	Sgt	5711

EQUIPMENT DENSITY

<u>TAM#</u>	<u>NOMENCLATURE</u>	<u>QTY</u>	<u>CU</u>	<u>SQ</u>	<u>S/T</u>
K4982	Tarpaulin, 23' x 15	4	20	0	.20
U3040	Concertina	55	121	0	.85
U3220	5FT Engr Stakes	180	180	0	.81
Z0001	Pub, 9cu Box	10	90	0	.75
Z0002	Office Sup, 7 Cu Box	3	21	0	.23
Z0004	Tools 24 cu bx	2	48	0	.30
Z0010	Consumables	3	0	48	3.00

DET MWHS
PERSONNEL
35

<u>CU</u>	<u>SQ</u>	<u>S/T</u>
5039.29	1,219	58.32

AVIATION COMBAT ELEMENT

PERSONNEL	<u>CU</u>	<u>SQ</u>	<u>S/T</u>
196	10,359.29	2110	98.85

COMBAT SERVICE SUPPORT ELEMENT

PERSONNEL

<u>T/O LINE#</u>	<u>BILLET</u>	<u>T/O RANK</u>	<u>MOS</u>
H&S CO, H&S BN FSSG			
1A	GROUP COMMANDER	BGEN	9903
1B	AIDE	LT	9910
1C	GROUP SGTMAJ	SGTMAJ	9999
1D	ADMIN CLERK/DRIVER	SGT	0151
2B	STAFF SECT	CAPT	9910
2C	PERS/ADMIN CLERK	GYSGT	0193
2D	ADMIN CLERK	SGT	0151
3A	AC/S G-1	COL	9906
3C	ASST G-1	MAJ	0180
3F	G-1 CHIEF	MGYSGT	0193
3G	ADMIN CLERK	CPL	0151
13	ASST G-3	LTCOL	0402
14	ASST G-2	MAJ	0202
14A	G-3 CHIEF	MGYSGT	0491
18	INTELL CHIEF	SSGT	0231
20	LOGMAN/DRIVER	PVT	0431
29	G-4 OPS OFF	MAJ	0402
29C	G-4 CHIEF	MGYSGT	0491
29D	MMO	MAJ	0402
32	MAINT MGT ANAL	GYSGT	0411
33	G-4A/SUPO	MAJ	3002
35	LOG CLERK	SSGT	0431
37	LOG CLERK/DRIVER	PVT	0431
54	AC/S OPS	COL	9910
55	PLANS OFFICER	MAJ	0402
56	OPS CHIEF	MGYSGT	0491
63	SUPPLY SPT OFFICER	LTCOL	3002
69	MAINT SPT OFFICER	MAJ	2102
78	ENGR SPT OFFICER	LTCOL	1302
85	TRANS SPT OFFICER	LTCOL	0402
117	HLT SVC SPT OFFICER	CDR	2300
262	BN COMMANDER	LTCOL	9910
264	BN SGTMAJ	SGTMAJ	9999
274	S-3/LOG OPS	CAPT	0402
275	OPS CHIEF	SSGT	0431
277	LOG MAN/DRIVER	CPL	0431
126A	FINANCIAL ACCT OFF	WO	3406
127	FISCAL DATA NCO	SGT	3043
131	SUP ADMIN CLERK T&R	SSGT	3043
137	PROCUREMENT OFFICER	CAPT	3040
138	PROCUREMENT CHIEF	GYSGT	3044
143	OIC SPL ACCTS	CAPT	3002
144	SPL ACCTS CHIEF	CPL	3043
149	RECORDS MNG OFFICER	LT	3002
150	RECORDS MNG CHIEF	GYSGT	3043
156	CL VIII MGR	LCDR	2300
162	SHOP STORES OFFICER	LT	3010
163	SHOP STORES CHIEF	GYSGT	3043
168	ORD ISSUE NCOIC	SGT	3043
169	RECORDS CLERK	CPL	3043
170	WAREHOUSE MAN	LCPL	3051

EQUIPMENT DENSITY

<u>TAM#</u>	<u>NOMENCLATURE</u>	<u>QTY</u>	<u>CU</u>	<u>SQ</u>	<u>S</u>
H&S BN EQUIPMENT DENSITY					
A2182	RADIO SET, MRC-134	2	700	118	2
B0011	AIR COND TYPE A/E				
	32C-39	2	126	47.28	
B1045	MEP-007	2	319.6	95.68	7
C4260	CAMO SCREEN SPT SYS	20	176.7		1
C4261	CSS-LWEIGHT RADAR				
	SCATTER WOODLAND	10	160		1
C4262	CSS-LWEIGHT RADAR				
	TRANSPARENT WOODLAND	25	125		
C4436	CAN, WATER MILITARY	10			
C4527	DEPLOYABLE FOR AUTO				
	SERV SYS	1	7728		30
C5320	OFFICE SUP SET, FIELD				
	DESK	37	296		2
C5410	OFFICE SUP SET, FIELD				
	TYPEWRITER	5	45		
H2443	FIELD TELEPHONE SET	37	37		
K4128	CAN GASOLINE MILITARY	5	5		
K4321	EXTINGUISHER FIRE	7	19.53		
	5CU MOUNT OUT BOXES	12	720		
K4509	LANTERN SET KEROSENE	4	.68		

PERSONNEL

<u>T/O LINE#</u>	<u>BILLET</u>	<u>T/O RANK</u>	<u>MOS</u>
H&S CO, SUP BN			
3	BN COMMANDER	LTCOL	3002
5	BN SGTMAJ	SGTMAJ	9999
19	SUPPLY CHIEF	GYSGT	3043
22	LOG MAN/DRIVER	LCPL	0431
25	RATS OPNS/REQMTS NCO	GYSGT	3061
26	RATS REQMTS MAN	CPL	3061
39	S-4	CAPT	0402
42	LOG CHIEF	GYSGT	0491
44	LOG MAN	SGT	0431
51	OIC	LTCOL	3002
54	SUP OPS CHIEF	MGYSGT	3043
56	SUP ADMIN CLERK	CPL	3043
56A	SUP ADMIN CLERK	CPL	3043
59	I/O CHIEF	SSGT	3043
61	SUP ADMIN MAN	CPL	3043
64	NCOIC KEY PUNCH	SSGT	3043
66	KEY PUNCH OPER	CPL	3043
66A	KEY PUNCH OPER	CPL	3043
76	RECLAIM/DISPOS CHIEF	SSGT	3043
77	SUP ADMIN CLERK	SGT	3043
90	OIC GEN ACCTS	MAJ	3002
91	GEN ACCTS CHIEF	MSGT	3043
93	SUP ACCT CLERK	CPL	3043
93A	SUP ACCT CLERK	CPL	3043
93B	SUP ACCT CLERK	CPL	3043
95	STOCK CONTROL OFF	LT	3002
96	STOCK CONTROL CHIEF	GYSGT	3043
98	SUP ADMIN CLERK	SGT	3043
98A	SUP ADMIN CLERK	SGT	3043
103	ISSUE CONTROL CHIEF	SSGT	3043
105	SUP ADMIN CLERK	CPL	3043
105A	SUP ADMIN CLERK	CPL	3043
105B	SUP ADMIN CLERK	CPL	3043
113	OIC USING ACCTS	CAPT	3002
115	SECT CHIEF	SSGT	3043

PERSONNEL

<u>T/O LINE#</u>	<u>BILLET</u>	<u>T/O RANK</u>	<u>MOS</u>
120	RECORDS MGNT CHIEF	GYSGT	3043
278A	S-4	CAPT	0402
281	EMBARK MAN	SSGT	0431
AMMO CO, SUP BN			
40	PLATOON SERGEANT	GYSGT	2311
42	RECORD CLERK	CPL	2311
SUP CO, SUP BN			
72	ISSUE & RECEIV CLERK	GYSGT	3051
73	WAREHOUSE MAN	SGT	3051
74	WAREHOUSE MAN	CPL	3051
74A	WAREHOUSE MAN	CPL	3051
127	UAD LEADER (FUEL)	SSGT	3051
128	EL HANDLER	CPL	3051
MED LOG CO, SUP BN			
19	MED SUP TECH	HM1	8404
20	MED SUP TECH	HM2	8404

EQUIPMENT DENSITY

<u>TAM#</u>	<u>NOMENCLATURE</u>	<u>QTY</u>	<u>CU</u>	<u>SQ</u>	<u>S/T</u>
C5320	OFFICE SUP SET, FIELD DESK	20	160		1.62
C5410	OFFICE SUP SET, FIELD TYPEWRITER	6	54		.39
H2443	FIELD TELEPHONE SET	20	20		.09
K4321	EXTINGUISHER FIRE	2	5.58		.011
K4509	LANTERN SET KEROSENE	2	.34		.01
	5CU MOUNT OUT BOXES	13	65		.65

DET SUPPLY BN FSSG

PERSONNEL	CU	SQ	S/T
48	304.92		2.771

PERSONNEL

<u>T/O LINE#</u>	<u>BILLET</u>	<u>T/O RANK</u>	<u>MOS</u>
H&S CO, MAINT BN			
3	BN COMMANDER	LTCOL	3002
5	BN SGTMAJ	SGTMAJ	9999
18	S-2/3 OFFICER	MAJ	0402
20	OPNS NCO	MSGT	2181
26	S-4	CAPT	0402
28A	LOG CHIEF	GYSGT	0491
36	OIC MAINT CONT	MAJ	1310
38	MAINT CONT CHIEF	MSGT	0411
40	LOG DATA CONT CLERK	LCPL	0411
42	INSPECTION CHIEF	MSGT	2181

EQUIPMENT DENSITY

<u>TAM#</u>	<u>NOMENCLATURE</u>	<u>QTY</u>	<u>CU</u>	<u>SQ</u>	<u>S/T</u>
C5320	OFFICE SUP SET, FIELD DESK	5	40		.405
C5410	OFFICE SUP SET, FIELD TYPEWRITER	2	18		.13
H2443	FIELD TELEPHONE SET	5	5		.023
K4509	LANTERN SET KEROSENE	1	.17		.005
	5CU MOUNT OUT BOXES	3	15		.15

DET MAINT BN FSSG

<u>PERSONNEL</u>	<u>CU</u>	<u>SQ</u>	<u>S/T</u>
10	78.17		.713

PERSONNEL

<u>T/O LINE#</u>	<u>BILLET</u>	<u>T/O RANK</u>	<u>MOS</u>
H&S CO, ENGR SPT BN			
3	BN COMMANDER	LTCOL	1302
5	BN SGTMAJ	SGTMAJ	9999
16	S-2/3 OFFICER	MAJ	1302
17	S-2A/MIL GEOLOG	CAPT	1302
21	S-3A/CONST OFFICER	WO	1360
22	OPNS CHIEF	MGYSGT	1371
23	ENGR EQUIP CHIEF	MSGT	1349
25	OPN ASST/CONST CHIEF	GYSGT	1371
27	SURVEY/DRAFT CHIEF	SSGT	1441
28	CONSTR DRAFTSMAN	SGT	1411
29	CONSTR SURVEYOR	SGT	1441
30	NBC SPEC	SGT	5711
32	CONSTR DRAFTSMAN	CPL	1411
33	CONSTR SURVEYOR	CPL	1441
34	ADMIN CLERK	LCPL	0151
38	CONSTR DRAFTSMAN	PVT	1411
39H	CARPENTER	CPL	1371
39I	CARPENTER	LCPL	1371
41	S-4	MAJ	1302
42	MMO	CAPT	0402
42A	MMC	SSGT	0411
43	LOG CHIEF	SSGT	0431
45	LOG MAN	LCPL	0431

EQUIPMENT DENSITY

<u>TAM#</u>	<u>NOMENCLATURE</u>	<u>QTY</u>	<u>CU</u>	<u>SQ</u>	<u>S/T</u>
C5320	OFFICE SUP SET, FIELD DESK	12	96		.972
C5410	OFFICE SUP SET, FIELD TYPEWRITER	2	18		.13
C4436	CAN WATER MILITARY	2	2		.10
H2443	FIELD TELEPHONE SET	12	12		.054
K4509	LANTERN SET KEROSENE	2	.34		.01

DET ENGR SPT BN

<u>PERSONNEL</u>	<u>CU</u>	<u>SQ</u>	<u>S/T</u>
23	128.34		1.76

PERSONNEL

<u>T/O LINE#</u>	<u>BILLET</u>	<u>T/O RANK</u>	<u>MOS</u>
H&S CO, MT BN			
2	BN COMMANDER	LTCOL	3502
4	BN SGTMAJ	SGTMAJ	9999
13	S-2/3 OFFICER	MAJ	3502
15	MT OPNS CHIEF	MGYSGT	3537
16	TRK MASTER	MSGT	3537
17	TECH TRNG/NBC SPEC	SSGT	3529
17B	ROADMASTER	SSGT	3537
18	ADMIN/DRIVER	PFC	0151
20	S-4	CAPT	3510
21	MMO	CAPT	3510

EQUIPMENT DENSITY

<u>TAM#</u>	<u>NOMENCLATURE</u>	<u>QTY</u>	<u>CU</u>	<u>SQ</u>	<u>S/T</u>
C5320	OFFICE SUP SET, FIELD DESK	4	32		.324
C5410	OFFICE SUP SET, FIELD TYPEWRITER	1	9		.065
C4436	CAN WATER MILITARY	2			
H2443	FIELD TELEPHONE SET	4	4		.018
K4509	LANTERN SET KEROSENE	1	20		.1
	SCU MOUNT OUT BOXES	2	10		.1

DET M.T. BN FSSG

<u>PERSONNEL</u>	<u>CU</u>	<u>SQ</u>	<u>S/T</u>
10	75		.607

PERSONNEL

<u>T/O LINE#</u>	<u>BILLET</u>	<u>T/O RANK</u>	<u>MOS</u>
SERV CO, H&S BN FSSG			
121	DIRECTOR	LTCOL	4002
123	INSTALLATION CHIEF	MGYSGT	4038
125	PERS/ADMIN CHIEF	GYSGT	0193
126	ADMIN CLERK	SGT	0151
129	SUPPLY CLERK	SSGT	3043
130	SUPPLY ADMIN	CPL	3043
134	OPS OFFICER	MAJ	4002
136	DATA SYS OPS CHIEF	MSGT	4034
140	COMPUTER OPS HEAD	MSGT	4038
142	COMPUTER OPERATOR	SSGT	4038
142A	COMPUTER OPERATOR	SSGT	4038
143	COMPUTER OPERATOR	SGT	4034
143A	COMPUTER OPERATOR	SGT	4034
145	COMPUTER OPERATOR	LCPL	4034
145A	COMPUTER OPERATOR	LCPL	4034
145B	COMPUTER OPERATOR	LCPL	4034
148	TECH SPEC HEAD	MSGT	4038
149	TECH SPEC	SGT	4038
149A	TECH SPEC	SGT	4038
155	I/O CONT SEC CHIEF	SSGT	4038
156	I/O CONT CLERK	SGT	4034
156A	I/O CONT CLERK	SGT	4034
161	SYS SOFTWARE OFF	MAJ	4002
164	PROGRAM CHIEF	MGYSGT	4069
165	CONTROLLER/SYS PROG	MSGT	4069
167	CONTROLLER/SYS PROG	SGT	4069
167A	CONTROLLER/SYS PROG	SGT	4069
169	PROG COBOL	MSGT	4063
171	PROG COBOL	SSGT	4063
171A	PROG COBOL	SSGT	4063
177	EAM SECT HEAD	SSGT	4038
179	EAM MAN	CPL	4038
179A	EAM MAN	CPL	4038
DET H&S BN FSSG			
PERSONNEL	CU	SQ	S/T
84	10,138.91	260.96	42.051

PERSONNEL

<u>T/O LINE#</u>	<u>BILLET</u>	<u>T/O RANK</u>	<u>MOS</u>
H&S CO, LAN SPT BN			
3	BN COMMANDER	LTCOL	0402
5	BN SGTMAJ	SGTMAJ	9999
13	S-2/3 OFFICER	MAJ	0402
16	OPNS CHIEF	MGYSGT	0491
19	INTEL ASST/NBC NCO	SGT	0211
21	LDG SPT MAN/DRIVER	CPL	0431
26	S-4	MAJ	0402
27	MMO	CAPT	0410
28	LOG CHIEF	MSGT	0491
29	MMC	GYSGT	0411

EQUIPMENT DENSITY

<u>TAM#</u>	<u>NOMENCLATURE</u>	<u>QTY</u>	<u>CU</u>	<u>SQ</u>	<u>S/T</u>
A2182	RADIO SET MRC-134	1	360	60	1.685
C4260	CAMO SCREEN SPT SYS	6	18.6		.21
C4261	CSS-LWEIGHT RADAR				
	SCATTER WOODLAND	1	5		.035
C4262	CSS-LWEIGHT RADAR				
	TRANSPARENT WOODLAND	5	25		.175
C4436	CAN, WATER MILITARY	4			
C5320	OFFICE SUP SET, FIELD				
	DESK	11	88		.891
C5410	OFFICE SUP SET, FIELD				
	TYPEWRITER	2	18		.13
H2443	FIELD TELEPHONE SET	11	11		.0495
K4509	LANTERN SET KEROSENE	2	.34		.01
K4128	CAN GAS MILITARY	2	2		.10
K4321	EXTINGUISHER FIRE	2	5.58		.011
	5CU MOUNT OUT BOXES	6	30		.3

PERSONNEL

<u>T/O LINE#</u>	<u>BILLET</u>	<u>T/O RANK</u>	<u>MOS</u>
B&P CO, LAN SPT BN			
3	CO COMMANDER	MAJ	0402
11	OPN OFFICER	MAJ	0402
13	OPNS CHIEF	GYSGT	0481
16	FREIGHT OPN CLERK	CPL	3121
20	B&P CHIEF	GYSGT	0491
21	B&P NCO	SSGT	0431
66	AIR DELV MAN	SSGT	0481
67	AIR DELV MAN	SGT	0451
68	AIR DELV MAN	CPL	0451
69	AIR DELV MAN	LCPL	0451
69A	AIR DELV MAN	LCPL	0451
69B	AIR DELV MAN	LCPL	0451
69C	AIR DELV MAN	LCPL	0451
69D	AIR DELV MAN	LCPL	0451
70	AIR DELV MAN	PVT	0451
70A	AIR DELV MAN	PVT	0451
70B	AIR DELV MAN	PVT	0451
70C	AIR DELV MAN	PVT	0451
70D	AIR DELV MAN	PVT	0451

EQUIPMENT DENSITY

<u>TAM#</u>	<u>NOMENCLATURE</u>	<u>QTY</u>	<u>CU</u>	<u>SQ</u>	<u>S/T</u>
K4128	CAN GAS MILITARY	2	2		.01
K4321	EXTINGUISHER FIRE	2	5.58		.011

DET LSB FSSG

PERSONNEL	CU	SQ	S/T
29	571.1	60	3.617

PERSONNEL

<u>T/O LINE#</u>	<u>BILLET</u>	<u>T/O RANK</u>	<u>MOS</u>
H&S CO MED BN			
2	COMMANDING OFFICER	CAPT (USN)	2300
4	CHIEF OF PROFESSION	CDR (USN)	2100
6	SGTMAJ	SGTMAJ	9999
7	SR NAVENL ADVIS TO CO	HMCM	0000
18	S-4/MED SUP OFF	LCDR	2300
19	LOG MAN	SSGT	0431
24	S-3 OFFICER	LCDR	2300
HOSP CO, MED BN			
28	CHIEF OF SVC	CDR	2100
30	NEURO SURGEON	LCDR	2100
31	OPHTHAMOLOGIST	LCDR	2100
32	RADIOLOGIST	LCDR	2100
33	THORACIC SURGEON	LCDR	2100
34	ORTHOPEDIC SURGEON	LCDR	2100
35	ORAL SURGEON	LCDR	2200
36	GEN SURGEON	LCDR	2100
37	ANESTHESIOLOGIST	LCDR	2100
37A	ANESTHESIOLOGIST	LCDR	2100
38	INTERNIST	LT	2100
38A	INTERNIST	LT	2100
40	NURSE ANESTHETIST	LT	2900
41	CLINIC PHYCHOLOGIST	LT	2300
42	NURSE ANESTHETIST	LT, J.G.	2900
43	LEADING CHIEF	HMCS	0000
44	PHARMACY CHIEF	HMC	8482
46	LAB TECH	HM1	8506
50	SURGICAL WARD	HM1	8404
50A	SURGICAL WARD	HM1	8404
53	BLOOD BANK TECH	HM2	8404
53A	BLOOD BANK TECH	HM2	8404
54	ADMIT SHOCK WARD	HM2	8404
54A	ADMIT SHOCK WARD	HM2	8404
58	LAB TECH	HM2	8506
58A	LAB TECH	HM2	8506
59	OPER RM TECH	HM2	8483
59A	OPER RM TECH	HM2	8483
60	SURG WARD	HM2	8404
60A	SURG WARD	HM2	8404
60B	SURG WARD	HM2	8404
61	X-RAY TECH	HM2	8451
61	X-RAY TECH	HM2	8451
62	OPER RM TECH	HM3	8483
62	OPER RM TECH	HM3	8483
62	OPER RM TECH	HM3	8483
65	SURGICAL WARD	HM3	8404
65	SURGICAL WARD	HM3	8404
65	SURGICAL WARD	HM3	8404
65	SURGICAL WARD	HM3	8404
66	CAST RM TECH	HM3	8489
66	CAST RM TECH	HM3	8489
67	DERMATOLOGY TECH	HM3	8495
70	SURGICAL WARD	HN	8404
70	SURGICAL WARD	HN	8404

EQUIPMENT DENSITY

<u>TAM#</u>	<u>NOMENCLATURE</u>	<u>QTY</u>	<u>CU</u>	<u>SQ</u>	<u>S/T</u>
C4260	CAMO SCREEN SPT SYS	5	15.5		0.175
C4262	CSS-LWEIGHT RADAR				
	TRANSPARENT WOODLAND	5	25		0.175
C4436	CAN WATER MILITARY	20	20		1.0
C5320	OFFICE SUP SET,				
	FIELD DESK	15	120		1.215
C5410	OFFICE SUP SET,				
	FIELD TYPEWRITER	4	36		.26
C8600	AMAL 618 LAB EQUIP	1	115		.65
C8604	AMAL 619 LAB SUPPLY	3	138		.75
C8608	AMAL 621 BLOOD BANK	2	142		.90
C8610	AMAL 624 BLOOD BANK				
	SUPPLY	5	90		.75
C8614	AMAL 627 X-RAY				
	EQUIPMENT	1	143		1.3
C8618	AMAL 629 PHARMACY				
	EQUIPMENT	1	26		.15
C8620	AMAL 630 PHARMACY				
	SUPPLY	2	68		.25
C8624	AMAL 631 S/ST				
	EQUIPMENT	2	154		1.1
C8628	AMAL 632 S/ST SUPPLY	2	168		1.6
C8630	AMAL 633 WARD				
	EQUIPMENT	3	357		3
C8634	AMAL 634 WARD SUPPLY	5	1015		9.75
C8650	AMAL 639 OR EQUIPMENT	2	392		2.9
C8654	AMAL 640 OR SUPPLY	4	856		7.6
C8658	AMAL 649 X-RAY SUPPLY	1	95		1.25
H2443	FIELD TELEPHONE SET	15	15		.068
K4128	CAN GASOLINE MILITARY	4	4		.02
K4321	EXTINGUISHER FIRE	7	19.53		.039
	5CU MOUNT OUT BOXES	15	75		.75
K4509	LANTERN SET KEROSENE	4	.68		.02

DET MED BN FSSG

PERSONNEL	CU	SQ	S/T
52	4,089.71		35.67

PERSONNEL

<u>T/O LINE#</u>	<u>BILLET</u>	<u>T/O RANK</u>	<u>MOS</u>
H&S CO, DEN BN			
2	COMMANDING OFFICER	CAPT (USN)	2200
5	COMPANY COMMANDER	LT	2300

EQUIPMENT DENSITY

<u>TAM#</u>	<u>NOMENCLATURE</u>	<u>QTY</u>	<u>CU</u>	<u>SQ</u>	<u>S/T</u>
C4436	CAN WATER MILITARY	1	1		.017
C5320	OFFICE SUP SET,				
	FIELD DESK	2	16		.162
H2443	FIELD TELEPHONE SET	2	2		.009
K4509	LANTERN SET KEROSENE	1	.17		.005
	5CU MOUNT OUT BOXES	1	5		.05

DET DENTAL BN FSSG

PERSONNEL	CU	SQ	S/T
2	24.17		.24

COMBAT SERVICE SUPPORT ELEMENT

PERSONNEL	CU	SQ	S/T
258	15,386.15	320.96	87.429

TOTAL AIRLIFT REQUIREMENT

I AIRLIFT REQUIREMENTS FOR I MAF (NUC) , MSC AND SUBORDINATE HQS FLY IN ECHELON (BASELINE)

	PAX	CU	SQ	S/T
HEADQUARTERS	150	8,438.6	1,426.8	39.042
GCE	318	38,501.06	9,502	262.874
ACE	196	10,359.29	2,110	98.85
CSSE	258	15,386.15	320.96	89.429
TOTALS	922	72,685.1	13,359.76	490.168

- FIE will require 22 C-141's to move 490.168 S/T
- One C-5 will be required to move outsized cargo
- Three B747's will be required to move personnel if CRAF aircraft are utilized
- Following planning factors apply:

C-141 23 S/T

C-5 76 S/T

B-747 364 PAX

II AIRLIFT REQUIREMENTS FOR ADDITIONAL MODULES ABOVE BASELINE

	<u>CU FT - C141 ACFT</u>	<u>S/T - C141 ACFT</u>
ENCAMPMENT	14	4
NBC	1	1
COLD WEATHER EQUIP	2	2

COMPOSITE MAGTF FIRE SUPPORT COORDINATION

1. Purpose and Requirement. The purpose of this addendum is to address further fire support coordination (FSC) requirements within the composite MAGTF. As stated in the basic guidelines, MAB and MAU headquarters will each perform FSC during those periods when they are the lowest common headquarters above two or more ground maneuver elements. Described here are the sources of fire support coordination center (FSCC) personnel needed in these headquarters, and a process for transition of FSC responsibility from one MAGTF headquarters to another during the compositing process.

2. Sources of FSCC Personnel

a. General. The primary source of FSCC personnel for the MAB or MAU headquarters performing FSC is the respective headquarters itself. Additional sources may include other MAB or MAU headquarters in the operation, or a later deploying or non-deploying FSCC, such as the FSCC of a division or follow-on infantry regiment. (These alternatives presume that sufficient standardization of FSC equipment and training has occurred so that FSCCs throughout the FMF are interoperable.)

b. MAB or MAU Headquarters. With one exception, the tables of organization for permanent MAB and MAU headquarters (4917C and 4916C respectively) provide sufficient artillery, air, and naval gunfire personnel to form the nucleus of an FSCC within these headquarters. The single exception is the lack of a Navy line officer within the MAU headquarters; in this case, a suitable officer could be borrowed from a participating Navy staff or agency, such as a Supporting Arms Coordination Center. In all instances, FSCC communicators (and their equipment) will be required, and must be included, in the Detachment, Communication Battalion, FMF supporting the MAB or MAU headquarters.

c. Other MAB or MAU Headquarters. These headquarters will, of course, have the same intrinsic sources of FSCC personnel as the MAB or MAU headquarters performing FSC. They can be drawn upon either cooperatively or by direction of the composite MAGTF commander. Borrowing may either be temporary or permanent (e.g., to cover combat losses).

d. Later Deploying or Non-Deploying FSCCs

(1) Division FSCC. If additional FSCC personnel are needed, beyond the resources of the deploying MABs and MAUs, a Division FSCC is a logical source. Clearly, the required skills are available, and there is appeal in the fact that the Division Headquarters should eventually arrive in the objective area and assume control of all GCEs. Of course, the same strategic lift constraints which make it difficult to move the Division Headquarters also make it difficult, though to a lesser degree, to move the Division FSCC. This lift concern may be minimized if a "suitcase" Division FSCC is attached to one of the MAGTFs prior to its initial deployment.

(2) Another Infantry Regiment FSCC. This is a final source of FSCC personnel, with roughly the same pro's and con's as the Division FSCC. Of

course, these FSCC personnel would expect to return to an FSCC-deficient regiment if it arrives, which introduces the potential disadvantage of some personnel turbulence.

3. Transition of FSC Responsibility. The process for transition of FSC responsibility between MAB or MAU headquarters is, or should be, analogous to that which applies to the passage of control ashore in amphibious operations. When the FSCC performing coordination is informed that the FSCC next to perform coordination is ready to do so, then a passage of FSC responsibility occurs at a time mutually agreed upon by the two MAGTF commanders. Clearly, the FSCC next to perform coordination should not report readiness to do so until its personnel and equipment are in place, operational, and have established satisfactory communication with higher and lower FSCCs and fire support units. The FSCC relieved of FSC responsibility may remain in being as a fire support information center (FSIC), and serve also in a backup status to the relieving FSCC.

ADDENDUM VII

COMPOSITE AVIATION

1. Purpose. The basic guidelines provide for integration of aviation elements of the composite MAGTF under the primary MAGTF's ACE. The primary MAGTF's ACE is also designated Wing/Group (Forward) and its commander assigned as tactical air commander (TAC) of the composite force. While these actions establish the traditional single command channel for aviation, the complexity involved in integration merits additional explanation of the process. To provide this explanation is the purpose of this addendum.

2. Integration Will Take Time

a. There Are Several Reasons Why. The fact that it will take a considerable period of time to complete the integration of aviation in a composite MAGTF needs to be emphasized. As noted in the basic guidelines, hostilities will clearly affect the rate and extent of integration. If our forces are heavily engaged (a circumstance for which we must be prepared), it may be impossible -- and almost surely, unwise to try -- to reorganize aircraft units at that moment. (Of course, our Marine Air Command and Control System (MACCS) must be immediately integrated to provide the composite force with a single coherent C² system. There is a requirement for a single or at least a primary TACC, for defined sectors for TAOs, for designation of vital areas for missile defense, and for one or more DASCs depending on the degree of centralization of CAS and assault support.) Further, due to the task-organized nature of our current ACEs, particularly at the MAB level, there may still be some "shaking down" in progress as they arrive in the objective area. Therefore, in the interest of basic stability, we will want to move with care in undoing the structure which we have just assembled. Also, the aviation logistics pipeline will have just been established. It will probably be directed to the separate ACEs and will be tailored to the aircraft and weapons systems found in each ACE. The paramount need for continuity of logistic support will, in light of these factors, impose additional deliberateness in the integration process. Overall, it should be remembered that aviation has a long history of operating in a composite mode. There is no need to rush to disband/reorganize MAGTF ACEs that have successfully deployed.

b. It May Never Be Fully Complete. As stated in the basic guidelines, geography, the intensity of combat, and our future intentions are all factors which will affect the rate and degree of integration within the composite MAGTF. If our aircraft are operating from widely separated airfields, it may be neither practicable nor desirable to fully unify their organizational structure. We may well be content to operate with centralized command and control under the TAC, implemented through a single integrated MACCS (which can operate over a distance of up to two hundred miles). Also, in a short campaign, we might well retain one or more subordinate MAGTFs with their aviation, since that is the structure we may desire for redeployment.

3. How the Process Might Proceed

a. There Can Be No Doubt That We Want Centralized Command. Marine aviation fights best under the centralized command and control of the MAGTF commander, with decentralized execution. We must, therefore, move immediately

in this direction as the process of integration begins. Aviation assets are neither large enough, nor do they operate over battlefields that are expansive enough to make any other approach feasible. Throughout the process, the authority of the composite MAGTF commander and the TAC must be unquestioned. Together they will decide the specifics of how we integrate the aviation assets of the composite force.

b. The Composite MAGTF Commander is the Apportionment Authority. As soon as the commander of the composite force is named, he becomes the aviation apportionment authority. In other words, he will decide -- with the recommendation of the TAC -- what priority or percentage of effort to devote to each of the functions of aviation. In particular -- and this is a key reason why there can be only one apportionment authority and why it must be the composite MAGTF commander -- he will determine what amount of aviation effort, if any, is excess to the needs of the MAGTF and can, therefore, be made available to a joint commander.

c. Allocation and Tasking Authority May Vary. Authority for allocation of aircraft sorties and for preparation of air tasking directives will likely change during the process of integration. The responsibility for deciding this, however, is fixed in the TAC, subject only to the overall authority of the composite MAGTF commander. Especially if our forces are widely separated or if communications are uncertain, the TAC may initially determine that the individual ACEs will make their own allocations and taskings in execution of the apportionment decision of the force commander. Later, and as soon as he can, the TAC should centralize these important aspects of control in order to optimize, from the overall force viewpoint, the employment of aviation assets.

d. The Transition of Functions Is Typically Predictable. Although the process of forming a composite MAGTF is situation-dependent, there is a typical transition of aviation functions which can usefully be considered. It goes as follows:

(1) Once the MACCS has been integrated into a single coherent system, the TAC's first priority is coordination of the air defense/anti-air warfare effort by such techniques as sector and vital area assignments. This effort, of course, is essential to the survival of the composite force and thus deserves priority consideration.

(2) The TAC concurrently coordinates and assigns requests for mutual support among the ACEs. This is accomplished either directly, using all ACE assets, or indirectly, by allowing direct liaison between ACEs.

(3) Next, the TAC centralizes control of the electronic warfare, deep reconnaissance, and deep air support/interdiction efforts. These aviation functions are normally conducted at greater ranges and with less direct coordination with, or immediate involvement of, the ground commander. Although small numbers of aircraft are involved, their missions are of such great importance to the composite force as a whole that they merit early centralization.

(4) Then, assault support and close air support come under scrutiny. Here, the TAC might choose to echelon the centralization of control. He might

first centralize those assets which have the longest range and/or are fewest in number (e.g., A-6s, KC-130s, OV-10s and possibly CH-53Es). Depending upon typical mission distances and perhaps other factors, medium, light, and attack helicopters and under certain circumstances, V/STOL CAS (AV-8s) might for some time be retained under and allocated/tasked by the individual ACEs. These aircraft would be used in direct support of still separate MAGTFs or other task forces. Later these remaining aircraft would also come under the centralized control of the TAC.

(5) An important note is that all this coordination and centralization of aircraft assets can be accomplished with a minimum of physical reorganization. Marines, aircraft and equipment need not be moved in order to attain a high degree of centralized command and control. As time and conditions permit, the first physical reorganization efforts should be the movement of aircraft and personnel to consolidate TACAIR and helicopter/OV-10 assets into separate groups. While not critical in a command and control sense, this move is important to efficient aviation supply support and aircraft maintenance.

(6) Lastly, aircraft maintenance and aviation supply support deserve attention. There is good reason to plan an early integration of maintenance and supply activities by type aircraft in order to optimize limited test equipment, tool kits and spare parts, as well as critical-skill technicians. However, geographical considerations alone may severely restrict execution of such planning. It may be necessary for a limited time to accept a lower mission capable/full mission capable rate. Support may need to include bringing the test equipment, spare parts and technicians to the aircraft, rather than vice-versa. Enemy action may also delay integration of these activities. Consideration should also be given to the possible need for dispersed maintenance and supply installations as a passive defensive measure. Under the authority of the TAC, effective guidance for sharing limited assets can be devised and implemented, without extensive physical integration of affected organizations. Here again, coordination and cooperation between the maintenance and supply efforts of the MAGTFs do not inherently require physical reorganization.

COMPOSITE COMBAT SERVICE SUPPORT

1. Purpose. This addendum addresses the integration of Combat Service Support Elements from two or more compositing MAGTFs.

2. Concept. The basic guidelines provide for the CSSE of the primary MAGTF to become the primary CSSE and its commander to become the first commander of the composite CSSE. This commander and his staff plan to centralize the general support functions of the combined CSSEs while maintaining decentralized, to the degree necessary, their direct support functions.

3. Centralization Vs. Decentralization

a. The Case for Centralization

(1) The primary concern satisfied by centralization of CSS functions is the positive control of activities and resources at the level of centralization. Such control suggests the necessity to centralize the information bases upon which combat service support decisions are made. This will also require the centralization of staff elements that maintain those data bases.

(2) Those supplies, equipments and technically skilled personnel that are both critical and of low density are prime candidates for centralization.

(3) The goal in centralization is the efficient use of limited personnel and material resources.

b. The Basis for Decentralization. The primary concerns motivating the decentralization of activities and resources are the desire to be quickly responsive to the needs of supported units, and the need for dispersion of resources in such a manner as to enhance flexibility and reduce vulnerability to hostile activities.

4. The Transition Process

a. Decentralized Control - Decentralized Execution

(1) From the composite MAGTF perspective, decentralized control and decentralized execution is the point from which the integration of all CSS functions begins, and each function remains in this category until integration of that function is commenced.

(2) Functions unique to or only required by one supported element may remain under decentralized control and decentralized execution.

b. Centralized Control - Centralized Execution. The following CSS functions normally require increased control even at some loss of flexibility. Arriving MAGTFs with these capabilities will have them brought under the full control of the primary MAGTF's CSSE as expeditiously as possible.

(1) Hospitalization, medical evacuation, graves registration, and dental support.

(2) Inventory management.

(3) Storage and issue of Classes IV, VII, VIII and IX.

(4) 4th echelon maintenance activities such as calibration and component repair.

(5) Supporting automated information systems.

(6) Special weapons operations as required or introduced.

c. Centralized Control - Decentralized Execution. These next tasks are accomplished best if centrally controlled by the primary CSSE. However, relatively large numbers of available personnel, equipment, and supplies permit the composite CSSE commander to favor flexibility and responsiveness in execution of support requirements.

(1) Military police/traffic control.

(2) Storage and issue of Classes I, II, III, and V.

(3) Transportation and salvage.

(4) Landing support operations.

(5) Engineer support operations.

(6) Food service, legal, postal, embarkation, and EOD.

5. Organizational Limitations. The compositing of CSSEs will require the integration of operations of multiple companies and separate detachments. This will be difficult to accomplish before the arrival of CSS battalion headquarters. Further, the interoperability of these units is inexorably linked to the standardization of all their data bases and management systems. This is not yet complete throughout the FMF. These organizational limitations must be recognized and carefully accommodated during the compositing process.

6. Governing Principles

a. The integration of CSS functions is highly complex, time consuming, and requires careful planning. In many cases centralized control can be achieved relatively quickly, while achieving centralized execution will be a more deliberate process, and occur at a much slower rate.

b. Limited material and/or personnel resources drive the concept of composite CSS support toward centralization. This is done to achieve efficiency; however, flexibility and responsiveness may be impaired in some situations.

c. Audit trails for all logistic support requested in the name of the originally deployed MAGTFs must be maintained. In some cases, such support has been requested by a higher headquarters. Additionally, the audit trail will be required until all units and materiel in support of the original deployments have been received.

ADDENDUM IX

COMPOSITE ADMINISTRATION

1. Purpose. This addendum discusses administrative challenges and some potential solutions involved in the formation of a composite MAGTF.

2. Background. Historically, MAGTFs have been seen as operationally oriented, temporary organizations with a limited interest in administration. However, FMFM 0-1 distinguishes between short-duration operations and those which are longer, and suggests for the latter a much broader degree of administrative control (ADCON) for the MAGTF. We now have a number of permanent MAGTF headquarters, some with assigned or earmarked subordinate organizations. A case can be, and sometimes is, made that these new MAGTFs should have substantial or full ADCON powers. There is a counter belief, however, which states that burdening the MAGTF with substantial ADCON responsibilities will reduce its single-mindedness and dedication to swift completion of the operational mission at hand. From a Marine Corps-wide viewpoint, the issue is unsettled and can be said to be evolving.

3. The Overall Challenge. We know that the overall challenge of administering a composite MAGTF will be great, as we will be dealing with a large number of organizations, units, and detachments possibly from different Marine Amphibious Forces and/or different Fleet Marine Forces. Most of the detachments will not be structured for independent administration. There will initially be a shortage of major and intermediate headquarters for such detachments to report to. (For example, a Detachment, Supply Co, Supply Bn, FSSG typically comes forward with each MAB, but neither the Supply Co nor the Supply Bn headquarters arrives until MAF augmentation is underway.) We are probably also faced with assimilating a number of parent monitored command codes and a plethora of reporting unit codes. The handling of replacements, inter- and intra-command transfers, pay records, military justice, order-writing authority, and control of classified material and communications security materials, are among the many other specific administrative matters which must be resolved during the transition. The authority of the composite MAGTF commander to deal with these matters is not intrinsically clear and needs to be established. (For instance, if to replace a combat casualty among his company commanders, a composite MAF commander desires to transfer a captain from an RLT provided by the 1stMarDiv to an RLT originally from the 2dMarDiv, how can he do it administratively, since different source MCCs are involved? Does this have to be a "special case," with an exchange of messages to and from HQMC? Is that acceptable in a combat situation? How do supporting administrative control units and disbursers get the word? Will the captain ever get paid again?) We thus expect a great overall challenge, and we must devise an administrative system which responds to it.

4. The Basic Principle of Composite MAGTF Administration. It should be remembered that administration is a complex area requiring a considerable amount of painstaking attention to detail, but it cannot be allowed to impede the accomplishment of the composite force's mission. This is the basic principle. Fortunately, for the most part, Marine Corps personnel administration is standardized and centrally controlled for uniformity. IGMC and MCDOSSET inspections monitor this standardization. Therefore, little deviation exists between major commands. Thus, we can say that the primary task that

faces all commanders in a composite environment is to ensure the timely continuity of standardized administrative functions during the increased operational tempo and geographical separation from normal higher headquarters. In all cases, it should be recalled that changes in OPCON do not automatically require like changes in ADCON.

5. Administrative Areas and Considerations/Possible Solutions

a. Monitored Command Codes (MCC). The composite MAGTF will initially have troops assigned from at least two monitored commands; for example, those of two MABs. There will be two MCCs only if such brigades have been in existence for some time and have therefore been consolidated into single MCCs. Today, it is much more likely that any composite MAGTF will be derived from a larger number of monitored commands. It is conceivable that a composite MAF will have units/monitored commands from two or more brigade headquarters, two divisions, two wings, two force service support groups, plus some number of "special cases" -- e.g., security communication teams, interrogator-translator teams, etc. One solution to reduce this to a more manageable number would be for Headquarters Marine Corps to establish new consolidated monitored command code(s) for the composite MAGTF and to assign all personnel in or destined for the new command to the new code(s). This is a reasonable solution when the operation is expected to be long term and when there is a requirement for the organizations (e.g., wing, division, FSSG) contributing forces to the composite MAGTF to retain their identity and be remanned/reformed at the home station. For example, in a situation where both I MAF and III MAF contribute forces to a composite MAF, it may be decided that the organizations within both contributing MAFs should retain their identity back at Camp Pendleton, MCAS Iwakuni, etc. Our composite MAF might then be designated V MAF and be assigned a block of new MCCs. Next, it may, under different circumstances be less confusing and more efficient for most units to be joined to the major command within an existing MAF. For example, where I MAF and its major subordinate commands are tasked to provide the composite MAGTF headquarters, all units, regardless of their original command, could eventually be joined to I MAF headquarters, 1stMarDiv, 3d MAF, 1st FSSG, etc. Additionally, Headquarters Marine Corps might decide to predetermine expeditionary MCCs which would be known by each MAF for use on order.

b. Reporting Unit Codes (RUCs). The number of reporting units will be quite large when, say, two brigades are composited to form a MAF. Some of these will be temporary, to cover detachments established for service with one of the compositing MAGTFs. In itself, the number of reporting units is not a problem, since all major Marine Corps commands have a large number. The problem in our case is that RUCs must all be properly associated with their new parent composite MAGTF. This can be done, when appropriate, by unit diary entries under direction of the composite MAGTF's administrative control unit (ACU) and supporting data processing installation (SDPI) (see below).

c. Assignments and Travel Order-Writing Authority. Arriving MAGTFs will have been initially manned by their parent MAGTF headquarters and/or principal subordinate commands. However, in the objective area, all individual replacements and perhaps some augmentation forces will almost certainly be processed through a centralized replacement personnel center administered by the composite MAGTF headquarters. The composite MAGTF commander should have order writing authority, provided in the initiating (compositing) directive, to move

personnel within his organization and to write or modify existing TAD orders. It must be noted that with order writing authority comes the inherent fiscal accounting responsibilities. These must also be addressed in detail in either the initiating directive or a subsequent fiscal guidance directive.

d. ACU/SDPI Support. Prior to deployment, every reporting unit will have been assigned an ACU/SDPI for support. This will be true whether the ACU/SDPI accompanies the MAGTF or remains in the rear. The relationships established between the deploying units and their ACU/SDPI should not be disturbed or interrupted until a composite force ACU/SDPI has arrived (or been formed) and is operational in the objective area. At that time, this aspect of ADCON can be shifted.

e. Disbursing. Deploying MAGTFs will have brought disbursing services with them. In most cases there should be no internally-generated requirement to alter the paying system until into the constitution phase. When the composite MAGTF's ACU/SDPI arrives, this would be a good time to shift disbursing services to a consolidated structure within the composite CSSE.

f. Military Justice. In order to avoid automatically having to refer major cases to the rear, composite MAGTF commanders should be given, by the initiating directive, courts-martial convening authority appropriate to their grade. Their capability to hold courts-martial will, however, be limited initially, due to operational tempo and a probable shortage of legal personnel. A composite legal services support office will probably be established in the CSSE, during the constitution phase.

g. Classified/COMSEC Material Control. Prior to deploying, units will have been assigned pick-up points for their COMSEC and other classified material. Any change in geographic area will necessitate message traffic informing supporting COMSEC Material Issuing Offices (CMIOs) of the changes. Likewise, when there is a change of ADCON, higher headquarters will have to be informed that entire COMSEC/classified material accounts have shifted. This will be similar to the procedures currently used by UDP units when departing for or returning from WestPac deployments.

6. Governing Principles

a. Changes in the ADCON of units within the composite MAGTF should be kept to a minimum, with an objective being that no unit should have to change ADCON more than once. Although it would be possible to shift the ADCON of a detachment from one temporary headquarters organization to another, and then later to its permanent command in the objective area, this option should be resisted. Rather, the preferred option would be to wait for the arrival in the objective area of the permanent command and then have detachments change ADCON just once. If this course is followed, there will be little administrative reorganization prior to the arrival in the objective area of parent headquarters during the constitution phase. This will produce the benefit of reducing administratively-caused turbulence during the critical early stages of the operation.

b. The anticipated length of operations will be a determining factor in deciding how much administrative reorganization takes place. For a very short operation (days/weeks), there should be no requirement for any changes of

ADCON. In operations that are expected to last a little longer (weeks/few months) only minimal changes should take place. Some personnel transfers and modifications of TAD orders may be all that is required. Any long term (months or years) operations will necessitate a complete consolidation of ADCON under the composite MAGTF headquarters and its principal subordinate commands.

c. While the extent of administrative changes will be determined by the anticipated length of the operation, the pace or timing of the changes will normally be keyed to the phases of the compositing process. During Phase I (Expansion), there will be no administrative changes. The MAGTFs being composited arrive in the objective area as self-contained units capable of at least temporarily performing all necessary administrative functions. ADCON changes at this time are neither necessary nor desirable. As we move into Phase II (Integration), the composite MAGTF commander must be able to move personnel within his organization. He will therefore require "limited or restricted" ADCON, to include the ability to transfer personnel and to write or modify existing TAD orders. As major subordinate headquarters arrive as part of augmentation during Phase III (Constitution), significant ADCON shifts become feasible. Only at this time, after a determination has been made on the extended length of the operation, should major ADCON changes should take place. Units and detachments will now be transferred to the arriving major subordinate commands as the conventional single MAGTF structure emerges.

d. In any case, the composite MAGTF/MAGTF (Forward) commander must have the flexibility to quickly move personnel and detachments to meet changing needs. The MAGTF commander will not always need nor should he be burdened with full ADCON over his entire organization. However, he should always be granted "limited or restricted" ADCON in the initiating directive to facilitate operational flexibility. That is, he would have order writing and transfer authority to move personnel within the composite MAGTF. Any transfers from one MCC to another MCC would have to be reported, of course, to Headquarters Marine Corps.

e. Since virtually all administrative procedures are standardized within the Marine Corps, there should be no requirement within compositing units to make great changes to current procedures. Current orders and procedures, executed under the authority of the composite force commander, with technical assistance from the original/composite ACU and SDPI, should be able to handle the vast majority of administrative situations arising from compositing.

ADDENDUM X

COMPOSITING DIRECTIVE

1. Purpose. This addendum addresses the requirement for a formal document to provide compositing-unique direction when a composite MAGTF is to be formed. It also provides a list of subjects that should be covered in such a directive.

2. Background

a. As the concept of compositing has progressed, it has become evident that one of the most important steps in execution will be the publication of some type of comprehensive formal document (e.g., initiating directive, activation order, letter of instruction, operation order, etc.) which addresses the issues unique to forming a composite MAGTF.

b. LFM 0-1, Doctrine for Amphibious Operations, defines the "initiating directive" as the directive initiating an amphibious operation. This directive is issued by the commander delegated overall responsibility for the operation. The "initiating directive" establishes the Amphibious Task Force (ATF), designates its Commander (CATF) and the Commander, Landing Force (CLF), and prescribes their command relationships.

c. FMFM 0-1, Marine Air-Ground Task Force Doctrine, addresses the MAGTF "activation order." Activation of a MAGTF will be accomplished by the issuance of an "activation order" by the Commanding General, Fleet Marine Force. It will contain, among other information, the troop list, designation of the MAGTF commander, command relationships and administrative instructions.

3. The Compositing Directive

a. Because of the unique complexities involved in compositing, a special directive must be issued either as part of or as soon as possible after receipt of the "initiating directive" or "activation order." It should certainly be issued, probably by or with the concurrence of the senior Marine commander, in sufficient time to enable subordinate commands to accomplish their required planning. The term "compositing directive" is considered an appropriate generic title for this order.

b. As indicated, this "compositing directive" can take many forms. As a minimum, the directive must include paragraphs or subparagraphs that specifically address compositing-unique matters.

4. Subjects to be Covered. Compositing-unique items appear to fall predominantly into three general areas: command and control (command relationships), administration, and logistics. The following is a list of subjects that should be addressed in any compositing directive:

- publication of a force list and identification of contributing commands
- designation of the composite MAGTF commander
- selection of the primary or base MAGTF/designation of the composite MAGTF (Forward)

- delineation of the timing and procedures for passing OPCON of the joining MAGTF(s) to the primary/base MAGTF
- guidance regarding the expected speed and degree of compositing
- delineation of the chain of command above the composite MAGTF
- authorization for the composite MAGTF commander to effect "account-to-account" transfers of CMS/CMCC/crypto equipment (will require coordination with the Defense Communication Material System)
- source of a personnel replacement pool
- use of a composite MAGTF "contingency MCC" with associated contingency RUCs
- new Address Indicator Groups which include the composite MAGTF
- identification of appropriation data to be used by the composite MAGTF
- identification of the supporting Marine Corps logistic base(s)
- SASSY adjustments made or required, and identification of the composite SASSY Management Unit
- responsibility for weapons and other material accountability within the composite MAGTF
- ADP support relationships, including identification of the composite Administrative Control Unit/Supporting Data Processing Installation

INTEROPERABILITY AND STANDARDIZATION

1. Purpose. This addendum addresses potential interoperability and standardization (I&S) problems which could be encountered in forming composite MAGTFs.

2. Information

a. Throughout the Marine Corps there is a recognition of I&S problems, but there is no concerted effort or coherent structure to alleviate the difficulties they produce. FMFM 0-1, Marine Air-Ground Task Force Doctrine, fails to mention I&S as a potential problem. The Marine Corps' officer education system, from The Basic School through Command and Staff College, lacks a comprehensive program of instruction to educate officers on I&S issues. During Corps-wide inspections and evaluations conducted by Field Supply and Maintenance Analysis Offices (FSMAOs), the Marine Corps Combat Readiness Evaluation System (MCCRES), and the Inspector General of the Marine Corps (IGMC), examination of I&S procedures are not a standard part of the process. Because of these Marine Corps-wide education and inspection deficiencies, additional training responsibilities are placed squarely on the FMF Commanders.

b. Recent awareness of I&S problems in the Marine Corps can be traced to the early stages of the Unit Deployment Program (UDP). The influx of East and West Coast battalions and squadrons to established WestPac organizations dictated a need for standardized operating procedures. As UDP has evolved over time, we have come to recognize that FMF-wide standardization of areas such as initial equipment issue, supply and maintenance, intelligence, fire support coordination, ordnance, communication procedures, etc., is essential for effective training, exercises, and most importantly, combat operations.

3. I&S Problems Potentially Associated with the Composite MAGTF Concept. The following list of potential problems serves to emphasize the need for detailed planning, organizational control, flexibility, and most importantly, realistic training objectives. This list is not intended to be complete but is, rather, intended to serve as a precursor to a check-list for future composite MAGTF exercises.

a. Failure to ensure the compatibility of communication equipment and procedures.

b. Conduct of operations without uniform SOPs in all MAGTF-wide areas.

c. Use of equipment assets in one element of the composite MAGTF without having the proper test sets, tools, skilled personnel, or repair parts available in the composite CSSE.

d. Failure to establish compatible embarkation and debarkation procedures, e.g., having an unloading plan for one MAGTF which is inconsistent with the loading plan for the composite force as a whole.

e. Failure to establish compatible supply and resupply procedures including consideration of Supported Activities Supply System (SASSY) matters.

f. Failure to standardize the weapons/ordnance and other major end-item accountability procedures.

4. Training Can Help. Composite MAGTF training exercises, regardless of the size of units involved, are productive both in creating a spirit of cooperation and an awareness of the need for I&S. Therefore, compositing exercises should be planned to place maximum strain on such functional areas as combat service support, communications, and aviation and artillery support, i.e., areas where I&S problems may occur. These exercises should bring out situations which units may encounter while adjusting to different SOPs, operational handbooks, FMFMs, and commanders' interpretation of doctrine. Failure to conduct realistic training may conceal major I&S difficulties.

5. Equipment Introduction Procedures Should Be Reviewed. The Marine Corps will continue to introduce new equipment and modernize existing equipment in the FMF. Introduction procedures should take into consideration specific contingency and mobilization plans, maritime prepositioning and other rapid deployment requirements, and the composite MAGTF concept. Almost certainly, each MAF should be simultaneously outfitted with sufficient quantities of new, modernized equipment to support Corps-wide interoperability of the leading units in contingency plans.

6. We Should Have More Uniform Standing Operating Procedures. Obviously, when compositing, Marine forces from different MAFs or even FMFs can be employed in the same objective area. Such a situation places greater emphasis on the need for compatible procedures. Interoperability can well be supported by publishing uniform standing operating procedures throughout the operating forces. These "standardized SOPs" should be published at a level that supports the composite MAGTF concept by relieving the commander of developing as many of the implementation details as possible. Some useful Marine Corps-wide SOPs could include:

a. Logistics SOP. Uniform procedures for accountability, equipment maintenance and modification, publication requirements, vehicle jackets, identification of containers and equipment, supply turnover, supporting ADP systems, etc., should be developed and updated.

b. Contingency Movement SOP. Corps-wide procedures for the planning, marshalling, preparation, and movement should be prepared through an expansion of existing FMFMs. Specific changes might include: information on the composition, functions, and organization of the air movement support group, alert and recall procedures, preparation of unit equipment for deployment or turn-in as appropriate, disposition of personal vehicles and baggage, requirement for unit embarkation and equipment depreservation teams, etc.

c. Communications SOP. A Corps-wide SOP for frequency and call-sign assignment, covered circuits, and daily changing of frequencies, etc., should be developed for all MAGTF levels.

7. Communications is an Especially Important Area. The composite MAGTF commander must ensure that all elements of his composite force can communicate

using compatible equipment. This communications capability, both covered and uncovered, will provide the necessary avenues for planning and resolution of other I&S problems. Commanders who fail to recognize that potential communications I&S problems exist will, at best, experience a reduction in their unit's warfighting capabilities.

8. Conclusion

a. From an I&S perspective, the preferred option would be to composite forces from the same division-wing-FSSG team; if this is not possible, compositing of forces from the same FMF should be sought. The least desirable option from an I&S viewpoint is compositing of forces from separate FMFs. Of course, there are several reasons for these preferences. First is the desirability of using forces with the same SOPs and equipment. Existing team skills and command relationships are other reasons. Finally, planning time, coordination difficulties, and potential for error in I&S as well as other areas increase with the separation of forces.

b. As a final point, the commander and his staff must always be thinking of potential interoperability and standardization problems. No longer is it appropriate for the commander to make such statements as "I see no problem" or "I'll straighten it out later." He must be constantly aware that all supposedly similar type units do not necessarily have the same equipment, same types of personnel, same organizational capabilities, or same operating procedures. I&S problems are real, and he must resolve them.

ADDRESS

Director
Advanced Amphibious Study Group
Headquarters and Service Battalion
Marine Corps Development and Education Command
Quantico, Virginia 22134-5010

Telephones:

(Autovon) 278-2275/2276

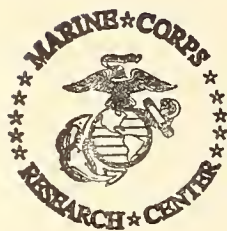
(Commercial) (703) 640-2275/2276

VA 50 .U66 1985
United States. Marine Corps.
Advanced Amphibious Study
Guidelines for forming a

JUN 1 2012

OCT 05 2012

GAYLORD F383 PRINTED IN U.S.A
Keep this card in the book pocket
Book is due on the latest date stamped
Book is due on the latest date stamped
Keep this card in the book pocket



MAR 04 1999



MARINE CORPS UNIVERSITY LIBRARY
2040 Broadway Street
Quantico, VA 22134-5107

